



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



3 2044 010 308 807

VOCATIONS FOR THE TRAINED WOMAN

WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION
BOSTON

Harvard College
Library



FROM THE BEQUEST OF

Lucy Osgood

OF MEDFORD, MASSACHUSETTS

**WOMEN'S EDUCATIONAL AND INDUSTRIAL
UNION, BOSTON**

DEPARTMENT OF RESEARCH

STUDIES IN ECONOMIC RELATIONS OF WOMEN

VOLUME I. Part 1. *Vocations for the Trained Woman. Opportunities Other than Teaching. Introductory Papers.* Edited by Agnes F. Perkins. 8vo, paper covers, \$0.60 *net.* Postage 14 cents extra.

VOLUME I. Part 2. *Vocations for the Trained Woman: Agriculture, Social Service, Secretarial Service, Business of Real Estate.* By Eleanor Martin, Margaret A. Post, Fellows in the Department of Research, Women's Educational and Industrial Union, and the Committee on Economic Efficiency of College Women, Boston Branch, Association of Collegiate Alumnae. Prepared under the direction of Susan M. Kingsbury, Ph.D. 8vo, \$1.50 *net.* Postage 16 cents extra.

VOLUME II. *Labor Laws and their Enforcement, with Special Reference to Massachusetts.* By Charles E. Persons, Mabel Parton, Mabelle Moses, and Three "Fellows." Edited by Susan M. Kingsbury, Ph.D. 8vo, \$2.00 *net.* Postage 24 cents extra.

VOLUME III. *The Living Wage of Women Workers. A Study of Incomes and Expenditures of 450 Women in the City of Boston.* By Louise Marion Bosworth. Edited with an introduction by F. Spencer Baldwin, Ph.D. 8vo, \$1.00 *net.* Postage 8 cents extra.

VOLUME IV. *Dressmaking as a Trade for Women.* By May Allinson, A.M. Prepared under the direction of Susan M. Kingsbury, Ph.D. In preparation.

VOLUME V. *Millinery as a Trade for Women.* By Lorinda Perry, Ph.D. Prepared under the direction of Susan M. Kingsbury, Ph.D. In preparation.

VOLUME VI. *The Boot and Shoe Industry as a Trade for Women.* Investigation conducted, under the direction of May Allinson, by the Fellows in the Department of Research, Women's Educational and Industrial Union. Report prepared by Lila Ver-Planck North. In preparation.

LONGMANS, GREEN, AND CO.

NEW YORK, LONDON, BOMBAY, AND CALCUTTA

WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION

BOSTON

DEPARTMENT OF RESEARCH



**STUDIES IN
ECONOMIC RELATIONS OF WOMEN**

VOLUME I, PART 2

Copyright, 1914, by
WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION
BOSTON, MASS.

GEO. H. ELLIS CO., PRINTERS. BOSTON, MASS.

0

VOCATIONS FOR THE TRAINED WOMAN

AGRICULTURE, SOCIAL SERVICE, SECRETARIAL
SERVICE, BUSINESS OF REAL ESTATE

BY
ELEANOR MARTIN AND MARGARET A. POST
FELLOWS IN THE DEPARTMENT OF RESEARCH, WOMEN'S EDUCATIONAL AND
INDUSTRIAL UNION
AND
COMMITTEE ON ECONOMIC EFFICIENCY OF COLLEGE WOMEN,
BOSTON BRANCH, ASSOCIATION OF COLLEGIATE ALUMNAE

PREPARED UNDER THE DIRECTION OF

SUSAN M. KINGSBURY, PH.D.

LONGMANS, GREEN, AND CO.

FOURTH AVENUE & 30TH STREET, NEW YORK

LONDON, BOMBAY, AND CALCUTTA

1914

Soc 1770.314

Harvard College Library

GRATIS

Feb. 3, 1922

MICROFILMED
AT HARVARD

VOCATIONS FOR THE TRAINED WOMAN

**AGRICULTURE, SOCIAL SERVICE, SECRETARIAL SERVICE
BUSINESS OF REAL ESTATE**

STUDIES

**PREFACE. BY FLORENCE JACKSON, Director of the Appointment Bureau.
Women's Educational and Industrial Union.**

**CHAPTER I. OPPORTUNITIES FOR WOMEN IN AGRICULTURE. BASED
ON A STUDY IN MASSACHUSETTS. BY ELEANOR MARTIN, formerly
Fellow in the Department of Research, Women's Educational and
Industrial Union. Foreword by President Kenyon L. Butterfield,
Massachusetts Agricultural College.**

**CHAPTER II. OPPORTUNITIES FOR WOMEN IN SOCIAL SERVICE. BASED
ON A SURVEY OF SOCIAL WORK IN NEW ENGLAND CITIES AND
TOWNS. BY THE COMMITTEE ON ECONOMIC EFFICIENCY OF COL-
LEGE WOMEN, Boston Branch, Association of Collegiate Alumnae.
Foreword by Vida D. Scudder, Professor of English Literature,
Wellesley College.**

**CHAPTER III. OPPORTUNITIES FOR WOMEN IN SECRETARIAL SERVICE.
BY MARGARET A. POST, Fellow in the Department of Research in
connection with the Appointment Bureau, Women's Educational and
Industrial Union. Foreword by President Henry Lefavour, Sim-
mons College.**

**CHAPTER IV. OPPORTUNITIES FOR WOMEN IN THE BUSINESS OF REAL
ESTATE. BASED ON A STUDY IN BOSTON AND SUBURBS. BY
ELEANOR MARTIN, formerly Fellow in the Department of Research,
Women's Educational and Industrial Union.**

CONTENTS

	<small>PAGE</small>
PREFACE	xv-xvii
LIST OF TABLES	xiii
LIST OF CHARTS	xiv

CHAPTER I.

OPPORTUNITIES FOR WOMEN IN AGRICULTURE BY ELEANOR MARTIN	1-69
Foreword by Kenyon L. Butterfield:	
Limitation of field for women—Types of agriculture adapted to women—The New England farm home	3-5
Introduction of scientific agriculture—Specialization—Scope and purpose of present study—Problem confronting the farmer	7-12
Market Gardening—General conditions of the business—Income and expenses of market gardeners interviewed—Opportunity for women	12-24
Fruit Growing—Best field in agriculture—Ways of developing industry—Land, labor and capital required—Expenses and returns from fruit farms—Essentials for success in fruit growing—Opportunity for women	25-33
Growing Flowers for the Market—Essentials for business—Best results from specialization—Expenses and profits—Prospect for floriculture good—Chief obstacle for women in the work—Special lines developed by women—Advisability of combining floriculture with some other form of agriculture	33-42
Nursery Culture—Difficulty in securing training and experience—Labor, capital and profits—Advantages as a business enterprise—Opportunity for women—Special lines of work	42-47
Poultry Raising—Exceptional advantages for women—Various lines of poultry raising—Investment, expenses, returns and profits in the business—Requirements for success—Modest beginning advisable	47-54

	PAGE
Bee Keeping—Importance of industry—Methods of conducting business—Expenses and profits—Bee culture as an avocation—Opportunity for women	54-60
Dairy Farming—General conditions of the business—Cost and profits in dairying—Labor problem—Poor outlook in business—Prospect for women	61-67
Agriculture as an occupation for women—Need and opportunity for training—Outlook for the girl on the farm,	67-69

CHAPTER II.

OPPORTUNITIES FOR WOMEN IN SOCIAL SERVICE BY THE COMMITTEE ON ECONOMIC EFFICIENCY OF COLLEGE WOMEN OF THE BOSTON BRANCH OF THE ASSOCIATION OF COLLEGIATE ALUMNAE	71-108
Foreword by Vida D. Scudder:	
Provisional character of work—Danger of commercializing social service—Opportunity presented	73-76
Purpose of survey—Questionnaire used in study—Geographical scope of investigation—Extent of social service in cities and towns visited—Organizations conducting social service	77-92
Types of workers—Visitors—Investigators—Medical social service workers—Settlement workers—Playground workers—Young Women's Christian Association workers—Matrons—Social workers in state institutions	92-102
Professional education needed—Special qualifications—Salaries and opportunities for advancement—Type of work and salary of social workers registered with Appointment Bureau—Opportunity for volunteer workers	102-108

CHAPTER III.

OPPORTUNITIES FOR WOMEN IN SECRETARIAL SERVICE BY MARGARET A. POST	109-143
Foreword by Henry Lefavour:	
Demand for competent secretaries—Training and experience—Increasing importance of occupation	111-112

CONTENTS

xi

	PAGE
Purpose and scope of investigation—Sources used in study —Relation of stenographic to secretarial work—Time and cost of preparation—Specialization and subdivision within stenographic work	113-119
Types of secretarial positions—The secretary in business firms, banks, publishing houses, stores and commercial offices—Physician's secretary—Secretaries in law firms—Official court reporters—Secretaries in educational institutions—Secretaries in social institutions— Private secretaries—Executive secretaries	119-127
Discussion of salaries—Comparison of salaries received by women with and those without college training after 1 to 5 years' experience—Salaries received by women without college training after 6 to 18 years' experience, College-trained secretaries—Subjects in college course considered of greatest value for work—Salaries of secretaries trained in Simmons College—Initial salaries of graduates from the 4-year and from the 1-year course after 2 to 5 years' experience	128-133
Personal qualities making for advancement—Limitations of secretarial work as a vocation—Outlook for broader opportunities	134-141
	141-143

CHAPTER IV.

OPPORTUNITIES FOR WOMEN IN THE BUSINESS OF REAL ESTATE BY ELEANOR MARTIN	145-165
Object of study—Sources on which based—Real estate situation in Boston—Change in the business within recent years—Development of real estate as a profession—Capital not essential—Brokers' commissions as regulated by Real Estate Exchange—Features of real estate business in Boston—Special lines of work—Outlook in Boston—Competition—Income from business—Outlook in suburbs	147-155
Experience of men in real estate business—Character and qualifications considered essential—Working up in the business—Opinions as to chance for women in field—Serious difficulties a woman must face—Opportunity for women in distinct field apart from competition	156-159

	PAGE
Experience of women in real estate business—Opinions as to outlook—Income standard compared with that of men—Type of woman required—Advantages in business—Lines most desirable for women—Control over unpleasant side of work	159-162
Opening for women already made—Problem of securing training and experience—Stenography the best entering wedge—Education and business training needed to place work on higher professional plane for women,	162-165
INDEX	169-175

LIST OF TABLES

CHAPTER I.

TABLE	PAGE
1. Investments, expenses, returns, profits and other data reported by market gardeners	16-17
2. Investments, expenses, returns, profits and other data reported by fruit growers	29
3. Investments, expenses, profits and other data reported by flower growers	36-37
4. Investments, expenses, profits and other data reported from nurseries	44-45
5. Investments, expenses, profits and other data reported by poultry raisers	50-51
6. Investments, expenses, returns, profits and other data reported by bee keepers.	59
7. Investments, expenses, profits and other data reported by dairymen	64-65

CHAPTER II.

1. Cities and towns visited with size and chief interests of each	81
2. Type of work and yearly salary of former positions held by women registering with the Appointment Bureau	106
3. Salaries offered in social work	107

CHAPTER III.

1. Salaries received after 1 to 5 years' experience by women with college training and women without college training	129
2. Salaries received by women without college training after 6 to 18 years' experience	131
3. Salaries received by 361 women with college training and 322 women without college training	132
4. Yearly salaries of secretaries who received their training at Simmons College by years of experience and length of course	140

LIST OF CHARTS

CHART		PAGE
1. Usual wage of stenographers and secretaries after 1 to 10 years' experience		130
2. Comparison of salaries received by secretaries with college training and without college training after 3 and 5 years' experience		133
3. Initial salaries of 167 secretaries who received their training at Simmons College		139

PREFACE

In 1910 the Women's Educational and Industrial Union published "Vocations for the Trained Woman," the first volume of a series entitled "Economic Relations of Women." This volume contained articles written by men and women engaged in the occupations discussed, and outlined in general the nature of the work, the training desirable, and the compensation. The present volume contains the results of intensive studies in the vocations of Agriculture, Social Service, Secretarial Service, and the Business of Real Estate.

The Appointment Bureau of the Union is organized with a two-fold aim:—

1. Placing of trained women in positions of responsibility and leadership.
2. Vocational counselling.

For both these, investigation is not only helpful, but necessary, if the work is to be maintained at the highest point of efficiency, since the placement work of the Bureau cannot be conducted effectively without a knowledge of facts gained most advantageously through research study. Not only the particular and special duties attached to each position must be known, but also the training that would best fit for it before a suitable candidate can be recommended. It is evident, too, that exact information is necessary, if one is to prepare for any profession.

The movement "Back to the Soil" has not been confined to men. The Bureau has had many requests for agricultural information from prospective women farmers. Others with no scientific knowledge of fruit culture, vegetable raising, or animal husbandry, and with a total disregard of markets, have sunk their small savings in farms and lost heavily on the investment. This agricultural study was undertaken to give definite information

to both groups. The introductory note has been written by President Kenyon Butterfield, who has done so much to make agriculture a paying profession instead of a losing business.

During 1911 and 1912 fourteen small bulletins were issued by the Appointment Bureau, each taking up more specifically one occupation open to women. These studies were prepared by Miss Eleanor Martin, then Field Agent of the Bureau. The last four of these series outlined distinct forms of Social Service in Boston, Medical Social Service, Organizing Charity, Social Service for Children, and Settlement Work.

To fill the evident need for wider information, a Committee on the Economic Efficiency of College Women of the Boston Branch of the Association of Collegiate Alumnae, in co-operation with the Appointment Bureau, made a further study of Social Service opportunities in Eastern Massachusetts. The results of this study are given in Chapter II of this volume. The Association of Collegiate Alumnae further aided the Union in the preparation of material by subscribing to the fellowship under which the studies of opportunities in agriculture and the business of real estate were made, and by making a money gift to be used in the preparation of this volume. The Union is glad to make grateful acknowledgment of this co-operation.

The business of real estate seems a possible one for woman. She herself has frequently owned or rented property. Moreover, she naturally has an intimate knowledge of the desirable features in a house. Many women who have found themselves forced to seek some means of self-support have asked for definite information about this subject. For these and others similarly situated this study has been made.

As much of the information presented in the chapters on Agriculture, Social Service and Real Estate was obtained from Massachusetts cities and towns, it will have an Eastern flavor, and the book must be read with the locality in mind. But, though salaries and economic conditions may be sectional, human nature is not, and the same qualifications necessary for work and the worker will be needed from Maine to California.

The experience of three years in the Appointment Bureau shows that a large proportion of college women are interested in

secretarial openings, since more have registered for this kind of work than for any other. Although many women have taken or are taking secretarial training, definite information in regard to this profession has been very meagre. It therefore seemed wise to make, during the past year, an especial study of the vocation of secretary. This was undertaken by Miss Margaret A. Post, Research Fellow, who had had secretarial training, and experience at Leland Stanford Junior University. Since she was able to consult both the Appointment Bureau records and those at Simmons College, and also to obtain information from secretaries in widely distant parts of the country, her investigation is not local.

Acknowledgment is earnestly made of the kind assistance given by men and women engaged in these various occupations. Especially to Miss Steere, Investigator for the Bureau of Research, Women's Educational and Industrial Union, is recognition given for her aid in the preparation of the chapter on Social Service.

It has been the aim of the editor to make this a practical and useful book of reference. Therefore, statistical information has been given as simply as possible, and blank schedules have been omitted.

The Appointment Bureau of the Women's Educational and Industrial Union, 264 Boylston Street, Boston, Massachusetts, will be glad at any time to try to answer any questions on the vocations discussed in this volume.

FLORENCE JACKSON.

CHAPTER I

OPPORTUNITIES FOR WOMEN IN

AGRICULTURE

(BASED ON A STUDY IN MASSACHUSETTS)

ELEANOR MARTIN

OPPORTUNITIES FOR WOMEN IN AGRICULTURE

FOREWORD

KENYON L. BUTTERFIELD

PRESIDENT, MASSACHUSETTS AGRICULTURAL COLLEGE

No one need doubt for a moment that there are abundant opportunities for women in the pursuit of agriculture as a method of making a living. I am not asked to argue that point. The facts are indicated in this well-prepared volume, which gives a "safe and sane" statement of the situation. It may not be out of place, however, to point out some of the limitations. If women are to be encouraged to go into agriculture, they should go with open eyes and with a clear realization of the boundaries of the field.

At the outset it may be said that for the twentieth-century type of agriculture special training is essential. Training does not necessarily mean a four years' course in an agricultural college, but it does mean a sufficient study of the problems to enable one to understand the principles of modern farming and to give further access to the best teaching on the subject.

It is clear that not all types of agricultural work are adapted to women. To put the matter less dogmatically, there are certain forms of agriculture that are more particularly adapted to women. Poultry keeping, small-fruit growing, or a combination of the two, floriculture on a small scale and in highly specialized lines, and, in general, the development of specialties where attention to detail, initiative, and the personal search for a special market are the great factors in success, are the lines of endeavor in which women are most likely to succeed. There are many

instances of woman's conspicuous success in dairying and in general farming, but I do not believe that these phases of agriculture promise to yield easily to woman's work, at least in New England. Perhaps a sufficient reason is that they do not yield easily to man's work in New England. The dairy business is in a most discouraging situation, and is likely to be so for some years to come. The call of the New England market is for the perishable product, grown in an intensive way, near its market, and distributed at a minimum of expense.

Lack of capital is the most serious difficulty which young men from the agricultural colleges have to meet in taking up practical farming. The same difficulty will of course meet young women, and perhaps in a more serious way, because the young man has a much larger range of salaried positions in agriculture open to him. It is a serious question whether for some years to come employers who are willing to take on young people for a partial apprenticeship, giving them positions as farm managers and superintendents at moderate pay, are likely to accept the services of young women. For the present, at least, this is a handicap which must be faced by young women who are thinking of going into agriculture.

The ordinary difficulties in agriculture young women will have to meet as well as young men. Here in New England the choice of location is of prime importance, not only because the soils vary in fertility and adaptability, but because the market for specialized products is so sensitive that oftentimes a few miles' extra "haul" or a crop a few days late may make all the difference between success and a struggle, if not a failure. These things do not, however, apply more to young women than to young men. The labor problem is a serious menace to our agriculture, and perhaps women will suffer more than men from this difficulty of procuring farm labor.

One final word, I hope, will not be misunderstood. We ought to give every encouragement to young women who like the life of the open, who love to deal with living things, either plants or animals, and who have the business instinct that enables them to work on equal terms with men in an industrial endeavor. But I do not want the young women of New England to lose sight of

the fact that the most important problem in New England agriculture is the problem of the New England farm home, and that the only individual who can solve that problem is the woman who is willing to devote herself to making that home what it ought to be. We confer upon the problems of country life. We admit its isolation. We suggest means of relief. We wish to enlarge the functions of the country church. We hope for larger recreative facilities in our country communities. But in absolutely every one of these fields of improvement we must depend ultimately upon the right sort of home life in the community. If the women of the country homes are not satisfied, the men and boys will not be satisfied. If women cannot find in the country home ample opportunity for growth and for service, our country life is doomed to fall short. Let us hope that many young women will find a profitable and satisfying career in the business of agriculture. But let us hope that a far larger number will find a satisfying career in the vocation of rural home making.

OPPORTUNITIES FOR WOMEN IN AGRICULTURE

INTRODUCTION

Comparatively few years ago the interests and opportunities of city life attracted people of every class. The farms were deserted, and many of them were abandoned. At present, however, the return call has sounded. People are again anxious to get back to the farm. This awakened interest in agriculture may be due to a natural reversion of feeling, to a growing appreciation of the peacefulness of the country in contrast with the stress and whirl of city industrial and commercial life.

In New England it is only recently that men have come to make use of modern methods and scientific principles which have for years been found valuable in other branches of industry, and which have been used even in agriculture in other parts of the world. The New England farmer has carried on his farm as his father did before him, raising general crops, but keeping few accounts and paying little attention to the business side of his farm. He seldom considered which products were bringing in the best returns and which were reducing the profits of the years. His idea seems to have been that the farm should raise all products needed by the family. The farmer's day was often 14 to 15 hours in length, and at its close he was too weary to think of better methods and to learn new principles of farming. Even when agricultural men in the West began to make use of modern methods, the New England farmer still clung to his old-fashioned ways. He still called the sulky plough the "lazy man's plough."

The change in New England has been very largely due to the efforts of the agricultural colleges. For a time the old-fashioned farmer scouted the ideas and theories of the scientists from the agricultural colleges, and the pure theorists from the colleges

despised and ignored the practical knowledge of the experienced farmer. But the transition period has come and gone, and at present there is a realization that in agriculture, as in other industries, a union of scientific knowledge and practical experience is essential to best results.

One of the first signs of this new agriculture is the attempt at specialization. The old style of general farming is disappearing. Although one still finds many farms where general products are raised, yet at least an attempt is made to discover the most profitable line, resulting in the use of book-keeping, a vast gain over old methods. In consequence some land-holders are developing their farms into market gardens or fruit orchards, into nursery plants or poultry yards, each adapting his products to best conditions and markets. Another evidence of progress, and one which shows even better the influence of the agricultural colleges, is the growth of intensive farming. The term is a comparatively new one, and means that by special and excessive fertilization plants may be grown more quickly and the soil used two or possibly three times during the season. This implies the possibility of smaller farms with even better returns than can be secured from the many acres of the old-style farm. Whatever the cause of interest in agriculture may be, not only has it aroused among men a fresh enthusiasm for the farm and opened to them new possibilities for making it profitable, but it has suggested a new occupation for women. It is because of this renewed interest in country life and because so many women to-day are expressing a desire to find some kind of work which they may carry on with profit in the country that the following studies have been made.

The term "agriculture" is usually applied in a broad sense to any occupation which requires for its pursuit a certain amount of land. This study is a search for the opportunities both in general agriculture and in specialization in market gardening and fruit growing, greenhouse and nursery culture, poultry raising, bee keeping, and dairy farming. The effort has been to discover the general conditions in these different lines of agriculture, the qualifications which are necessary for success, the amount of capital essential and whatever returns and profits may be ex-

pected from the investment,—in short, what possibilities these various lines of work offer for women. The statements which are given below are based upon personal interviews and correspondence with 208 men and women who are at present engaged in special lines of agriculture.

The 184 separate cases studied, which included 145 men and 39 women, some who have been very successful in agriculture and some who have made barely a living, were chosen at random from the numbers engaged in each pursuit, although a special effort has been made to seek out the women farmers. Naturally, the plants varied in size and products and in the length of time the agriculturists had been engaged in the business, and also in the training which they had received for their work. Although the study cannot be considered extensive, it seems to be representative, and the situation portrayed may be accepted as typical of farming conditions in Massachusetts. Furthermore, the information received from men of such experience may be accepted as authoritative in regard to the opportunities for women in agriculture.

The farms of Massachusetts are certainly not large as compared with those in western states, and a large number of those studied were under 25 acres. This may be due to the small amount of land necessary for poultry raising, nurseries, and even market gardens. Orchards and dairy farms require the largest acreage with the result that somewhat over one-fifth of the farms included contain over 50 acres. On the whole, one hardly expects the farms to range much over 50 acres except in the larger commercial orchards and dairies. Our study therefore represents the average size farm. This variation in size suggests also a variation in product and hence in type of farm. It is this variation which makes the study in the main so complex, but it is also this variation which makes the field alluring to women in Massachusetts, for practically all lines of agriculture which might offer possible openings to women are here represented more or less completely. All of the farms selected raised garden truck for their own use, but 25 of these raised a surplus for the market, 10 were developing small fruits, and 14 large fruits or orchards, while 27 were carrying on dairies. Poultry was found on every farm, but in 40 instances it

had proved to be one of the most remunerative products, and so was being developed as the specialty of the farm. Fifty men and women were keeping bees, only 3, however, as a special business. Sixteen had greenhouses for flowers, and 14 for vegetables, while 15 had nursery plants.¹ That these industries are not in the experimental stage is seen by the long period for which so many have been on the farm. Furthermore, when a man has been engaged in one occupation for a period of years, his opinion relative to conditions and opportunities in that line becomes helpful and authoritative.

NUMBER OF AGRICULTURISTS WHO HAD BEEN BORN
AND BROUGHT UP ON THE FARM.

Poultry raising	5 out of 40 visited
Bee keeping	5 out of 47 visited
Market gardening	20 out of 25 visited
Fruit growing	12 out of 14 visited
Dairy farming	24 out of 27 visited
Greenhouse culture	8 out of 16 visited
Nursery culture	7 out of 15 visited

Our farms are to-day mostly carried on by those who have been born and brought up on the farms. A few go away for a time to engage in other pursuits, as, for instance, work in shoe shops, in factories, in stores, but return eventually and carry on the home farms or those of their own in the neighborhood. Though many have come into the business from boyhood, yet many of them are as progressive as any other good business men in trying to make use of every new discovery which tends to place agriculture on a better business and financial footing. Of the farmers interviewed, possibly 6 or 8 had taken regular or short courses at the agricultural colleges, but at least 5 others said that their sons or daughters had pursued such studies, and in every case the character of the farm has been modified in consequence. For example, one man who had a large general farm of 85 acres was

¹ The numbers given here do not in all cases represent separate studies, but are given to show the number engaged more or less extensively in the different pursuits, and will therefore, in some cases, be found to overlap.

persuaded by his son, whom he had sent to Amherst Agricultural College, to cultivate and trim his orchards and to set out new trees. At present, after about 4 years, they have one of the largest and most profitable fruit orchards in the state. In another instance the daughter was sent to an agricultural college to take the course in bee keeping in order that they might use bees in fertilizing the fruits which they had set out. A general farmer said he himself had no special training, but he was giving his daughter a full course in landscape architecture and nursery culture, as he considered that the best line open to women. It was particularly interesting to notice that every farmer who commented upon the work of the colleges was enthusiastic in their behalf, and many were reading the magazines and bulletins issued by agricultural authorities in order that they might keep abreast of the advance in scientific methods and discoveries.

As a business, there are three serious problems which confront the farmer. The first difficulty is his absolute dependence upon seasonal conditions. If the season be too early or too late in the spring, if there be excessive rains or droughts, or if there be late frosts, the farmer suffers. His returns are dependent not only upon climatic conditions, but also upon the market value of his products. If the market is overstocked or "glutted" when his crops are ready, his returns are very much reduced. Only in a few kinds of fruit or vegetables or flowers can he hold back his products for a better market. The poultry man aims to market his early chickens in time for the high prices. He may try various methods to secure eggs at the season when eggs are high, but in this as in vegetables he is dealing with causes which he may modify somewhat, but over which he has no control.

The seasonal aspect of farming is so well known that, while it is very important in considering the business, yet it is accepted more or less without question or complaint. The great problem which at present is vital to the farmer is that of labor. All men find the same difficulty here. It is often not a problem of securing good help, but of finding any help. The farmer is forced to rely upon foreign labor, Poles, Russians, and Italians, and to pay these men wages much higher than he used to pay to competent help. The expense and also the loss from the damage done to cattle and

crops by these ignorant laborers make the outlook very serious. Many of the farmers who referred to the difficulty said they were trying to solve the problem by attempting to cultivate fewer acres and with less help, others were doing what they could alone, and many whose farms were absolutely dependent upon laborers said that the problem was so serious that they were thinking of giving up the business altogether.

The other question which the farmer, whatever his special line, has to consider is that of marketing his products. If he has a city trade, he has two alternatives, either to sell to a commission house or to sell in the general market. In the former case he has less responsibility, but receives a lower price. But, in either case he has a middleman who takes a portion of the profits. By far the better way, and one which is possible only in a small local trade, is to "truck," or sell directly to the purchaser. In this way the farmer receives the full benefit of high prices paid for fresh vegetables and fruit, pure milk, fresh flowers, or poultry and eggs. Then his returns are much larger in proportion, though his plant must of necessity be smaller.

These conditions, briefly laid down as those which every farmer must meet, are referred to many times in the following pages in the attempt to show their bearing upon each branch of agriculture treated, as well as their relation to the qualifications and limitations of women who enter upon that field of enterprise.

MARKET GARDENING

INTRODUCTION.

Market gardening and fruit growing as lines of agriculture are so closely allied as to seem almost identical, and up to a few years ago it would have been both possible and advisable to group them together in practice. The business of the market gardener was to raise both vegetables and small fruits for the market, while no one attempted to make fruit growing a separate industry. But within a comparatively few years fruit growing has been developed to such an extent that it seems wise to consider it quite apart from market gardening. It must be kept

in mind, however, that there is no complete separation between market gardening and fruit growing in actual practice. The market gardener still raises small fruits for market and cultivates his orchards as far as possible, while the fruit grower raises vegetables for market, as well as fruit, but in the one case the raising of vegetables is the main business, while in the other it is the growing of fruit. In the following study, which deals with 39 farms where both vegetables and fruit are raised, the two lines of work are discussed separately in order that the conditions and the outlook for each may be more definitely presented and the future of each as an opportunity for women may be seen more clearly.

Market gardening is one of the earliest lines of agriculture to be developed. As soon as people began to congregate in cities, the demand for fresh vegetables arose, and the farmer made an effort to supply the demand. The business was at first small and occasional, but was later developed until the raising of fresh vegetables and small fruits for market became one of the most successful lines of agriculture, demanding large capital and much knowledge and experience, as well as keen business ability. Until within a few years the business has offered excellent returns for labor and capital expended, and attracted many men and women who were interested in life in the country. Recently, however, market gardening has lost some of its prestige, and is claimed to give small returns compared to those of 10 or 20 years ago. For this reason, and because the business of market gardening seems a natural occupation for the man or woman who wishes to work in the country, it has seemed wise to discover, if possible, what causes have led to its decline, how far they may be remedied, what the outlook is, and what opportunity the business offers for women to make a successful livelihood.

A study in detail of the situation is possible only from the point of view of practical gardeners. It is important to learn from them what products can be raised, what size of plant is necessary to secure certain results, and how large a working capital is essential in order to cover expenses, as well as the amount which must be invested in the plant itself. This study is based upon interviews with 25 practical market gardeners, who have been in the business for periods of time ranging from 5 to 50 years,

as shown in the following statement, and who can therefore speak with authority on this subject. Only one of these is a woman.

NUMBER OF YEARS MARKET GARDENERS INTERVIEWED HAVE
BEEN IN BUSINESS.

Under 5 years	4
5 years and under 10 years	2
10 years and under 20 years	4
20 years and under 30 years	7
30 years and under 40 years	3
40 years and under 50 years	2
50 years and over	1
Not reporting	2

GENERAL CONDITIONS OF THE BUSINESS.

The work of the market gardener is of two kinds, raising vegetables or "general garden truck" outside as distinguished from the growing in greenhouses of a special product, usually lettuce, cucumbers, radishes, and tomatoes. This work involves a thorough knowledge of conditions governing the planting, growth, and maturity of these crops and long experience in order to understand how to meet emergencies. For the person who would start a new plant, training and experience are most important. Of the men now in market gardening, 20 were born and brought up on the farm and so had a practical experience in gardening before taking up their special line, 3 had no training or experience, and 2 only attended the agricultural colleges. From this it appears that men have been able, though with difficulty, to secure for themselves by actual work the knowledge required for small gardening.

The size of plant necessary is closely related to the kind of product raised. In the cases studied these were varied. Twenty-one raised general vegetables outside, 12 had also greenhouses for vegetables, while 3 had greenhouses for flowers, mostly violets and sweet-peas. Five men combined the growing of small fruits with general garden products, one combined with his garden a dairy farm, another a poultry plant, and still another a nursery for shrubs and trees. Whether they grow plants in greenhouses or outside, many have hotbeds where they start young bedding plants for their own

use. These hotbeds range in size from 25 and 50 feet of sash to 10,000 feet, the larger number having between 300 and 600 feet.

From this variation in product it will be seen that there must be a corresponding variation in the amount of land cultivated, although the acreage necessary does not, on the whole, seem to be large. A market garden located where land is cheap can afford to have more land in use, but, where the land valuation is high, men have raised more vegetables in greenhouses than outside. Of the 24 who recorded the number of acres in use, 8 men had less than 25 acres under cultivation, 11 had 25 and under 50 acres, and only 5 had 50 acres or more. The majority of those having any uncultivated land had less than 25 acres, as will be seen by reference to the table given below:—

UNCULTIVATED LAND OWNED BY MARKET GARDENERS
INTERVIEWED.

Under 25 acres uncultivated	15
25 acres and under 50 acres uncultivated	3
50 acres and over uncultivated	4
Not reporting	3

Before discussing the detailed information secured, the attention of the reader is called to Table 1, in which the data for each case are presented.

Spring and summer are, of course, the busy seasons for market gardeners, and 14 of the 24 reporting employ from 10 to 20 laborers in the summer and only from 1 to 5 in the winter. In summer, on 14 farms reporting, 1 laborer is needed for each tract of from 1 to 3 acres. In winter, on 10 of the 22 farms reporting winter labor, 1 laborer is sufficient for each tract of from 5 to 15 acres. This seasonal variation in the number of acres that can be cared for by 1 laborer is greater on farms which do not have greenhouses than on those which do, the former using on an average 1 laborer for 3 acres in the summer and 1 for 10 acres in the winter, the latter employing 1 laborer for $2\frac{1}{2}$ acres in the summer and 1 for 4 acres in the winter. Of the 15 gardeners reporting any greenhouses at all, 13 employ from 2 to 5 helpers for each greenhouse during the summer, and all employ from 1 to 3 in each during the winter.

VOCATIONS FOR THE TRAINED WOMAN

TABLE 1, SHOWING THE INVESTMENTS, EXPENSES, RETURNS, PROFITS,
(Data are given as suggestive only. Discrepancies often appear in totals due to

Case Number	Number of Cultivated Acres in Farm at Present	Number of Green-houses	Number of Years in Business	Number of Laborers		Initial Capital	Present Capital	Annual Returns	Annual Profits
				In Summer	In Winter				
1	50	0	22	17 to 22	3 to 4	\$5,000	\$200,000	\$12,000	1/3 of returns or \$3,500
2	12½	5 small	12	9 men, 10 to 15 boys	3 to 4	\$12,000 to \$15,000	\$20,000	\$15,000 to \$18,000	\$9,000 to \$10,000
3	39	3 small	21	11 to 12	6	\$250	\$14,000	—	\$1,000 to \$1,500
4	3	4 large	3	15	2 to 3	\$25,000	\$25,000	\$20,000	\$10,000 to \$13,000
5	25	3	15	12 to 15	5	\$1,400	\$30,000 to \$35,000	\$11,000 to \$13,500	\$7,000
6	60	0	20	40 to 50	12	30 acres given him	\$100,000	—	From a loss of \$6,700 to a gain of \$10,000
7	36	9 large, 5 small	30	25	—	Inherited	\$70,000	—	\$7,000, formerly \$17,000 to \$25,000
8	44	6	40	14 to 25	—	None	\$25,000	\$15,000 to \$20,000	—
9	50	5	15	10	4	Inherited	\$20,000	\$10,000 to \$12,000	\$2,000 to \$2,500
10	Owns 5, rents 20	—	8 to 10	10 to 13	1	\$5,000	\$5,000	Seasonal	Living
11	20	0	22	12	2	\$1,000	\$5,000	\$5,000	\$500 to \$1,000
12	25	0	9	2 to 20	2	\$500	Rented	\$7,000 to \$7,500	\$300 to \$1,000
13	35	0	35	3	2	\$1,000	\$9,000	—	None
14	40	0	20	2 to 20	1 to 2	Shares	—	\$4,000	\$1,000 loss to \$1,000 gain
15	26	3	All life	5 to 6	4	Inherited	\$75,000	\$6,000 to \$10,000	Loss usually
16	14	0	43	10 to 13	4	\$15,000	\$15,000	\$7,000 to \$8,000	to \$2,000 to \$3,000
17	—	—	—	—	—	—	—	—	—
18	15	1	1	3	1	\$9,000	\$9,600	—	—
19	25	0	65	10	5	\$3,300	\$40,000	\$5,000	None
20	18	10 medium size	3	25	12	\$18,000	\$30,000 Also hires farm worth \$25,000	\$30,000	\$8,000 to \$10,000
21	5	25 hotbeds	1	2	1	\$5,000	\$5,000	\$2,000	\$450
22	90	8	23	12 to 20	10 to 12	\$4,500	\$40,000	\$24,000 to \$30,000	\$5,000 to \$10,000
23	70	13 large	27	40	27 to 33	\$40,000	\$100,000	\$40,000 to \$60,000	\$13,000 to \$20,000
24	12	10	15	20 to 35	12	—	—	—	—
25	45	4	30	20 to 35	10 to 15	Inherited	—	—	—

OPPORTUNITIES IN AGRICULTURE

17

AND OTHER DATA REPORTED BY 26 MARKET GARDENERS INTERVIEWED.
 variation in returns dependent on seasons and to incompleteness of accounts.)

Total Annual Expenses Exclusive of Interest on Invest- ment	ITEMIZED EXPENSES								Stock	
	Labor	Repairs	Keeping up the Herd	Fertilizer	Water	Taxes	Coal		Number Horses	Number Cows
\$7,800	\$5,000	\$250	\$400 to \$450	\$400	Not im- portant	\$1,700	—	—	4	—
\$6,000 to \$7,500	\$4,000 to \$5,000	\$50	\$800 to \$900	\$1,000	\$360	—	—	—	4	1
\$4,000 to \$5,000	\$2,500	\$1,200 New greenhouse	\$250 to \$300	\$216	—	—	—	—	3	8
\$5,000 to \$7,000	\$3,500 to \$5,000	\$90 to \$100	\$300 to \$400	\$1,000 to \$1,200	\$300 to \$350	—	—	—	2	—
\$5,000 to \$6,000	\$2,500	\$500	\$1,250 to \$1,500	\$1,000	\$250	\$250	—	—	6	2
\$7,000	—	—	\$1,500 to \$1,800	—	—	Very high	—	—	12	—
\$24,000 to \$26,000	\$18,000	\$500	\$2,000 to \$3,300	\$1,000 to \$1,200	—	—	\$3,200	—	9	—
\$5,500	\$5,000	\$500	—	—	—	—	—	—	8	—
\$5,000 to \$6,000	\$3,500	\$500	\$250	\$500	\$100	\$125	\$500	—	—	—
\$4,600	\$2,400	—	\$2,200	—	—	High	—	—	3	20
—	—	—	—	—	—	—	—	—	—	—
\$3,500 to \$4,500	\$1,800 to \$2,500	\$250	\$200	\$1,100 to \$1,300	\$25	\$42	\$55	—	—	—
\$2,800	\$1,000	—	\$800	\$800	\$37	\$170	\$40	—	—	—
\$2,750	\$1,000	Varies	\$1,000	\$500	\$40	\$150	—	—	—	—
\$4,000 to \$4,500	\$2,500	Varies	\$300	Varies	\$100	\$600	—	—	—	—
\$3,750	\$2,500	—	\$500	\$500	\$100	\$150	—	—	—	—
\$4,300	—	—	—	—	\$1,000	\$2,500	\$800	—	—	—
\$2,500 to \$3,000	\$500	\$100	\$250	\$20	—	\$1,700	—	—	—	—
\$5,400	\$3,500	Little (new buildings)	\$800	\$200	—	\$850	\$50	—	—	—
\$17,000 to \$20,000	\$8,000	\$1,000	\$1,200	\$1,500	\$800	\$1,100	\$2,000	—	—	—
\$1,850	\$900	\$200	\$300	\$300	—	\$75	\$75	—	—	—
\$15,000 to \$17,000	\$7,500	\$1,500	\$1,700	\$3,200	—	\$400	\$1,700	—	—	—
\$35,000 to \$36,000	\$17,000	\$5,000	\$2,500 to \$3,000	\$3,500 to \$4,000	\$2,000	\$2,000	\$3,000	25	—	3
\$10,000 to \$12,000	\$5,000 to \$7,000	—	\$1,200 to \$1,500	\$500	—	\$700	\$2,000	—	—	—
—	—	—	—	—	—	\$1,200	—	—	—	—

The average wage paid to these men is \$10 a week without board or \$5 with board.

**WAGE PAID TO MALE LABORERS BY MARKET GARDENERS
INTERVIEWED.**

\$9 to \$10 per week	10
\$11 to \$12 per week	6
\$5 per week and board	4
Not reporting	5

The problem of labor is more difficult for the market gardener than for any other type of farmer. He is usually forced to take any one he can get, but, if a choice is possible, many gardeners prefer Italians. Poles, Russians, and Irishmen are also found in the market gardens, with occasionally Frenchmen, Germans, and Americans.

**NATIONALITIES PREFERRED AS LABORERS BY MARKET
GARDENERS INTERVIEWED.**

Italian	8
Polish	4
Mixed (Irish, Polish, French, German, American)	4
Irish	3
Russian	1
No preference	5

Because reliable help is scarce, many farmers are glad to get women as laborers. They are for the most part Italians, who work by the day, pulling weeds and at times picking and sorting vegetables. The wage paid is \$1 per day. In the winter there is little work for these women, save occasionally when it is necessary to sort vegetables, but the number employed during the summer, as is seen from the following statement, is significant as showing not only the relative size of the plants, but also the difficulty in securing men to do this work:—

NUMBER OF WOMEN LABORERS EMPLOYED BY MARKET
GARDENERS INTERVIEWED.

None	8
1 house girl	4
2 to 3 women	2
4 to 5 women	1
1 to 10 women	4
11 to 20 women	1
Women when men were not available	1
Not reporting	4

Before we can consider the amount of capital necessary in the general market garden and the returns which may be expected, it is necessary to discover the character and amount of the expenses involved in carrying on these plants. Here the figures given are taken from the 25 cases studied. It has been impossible to secure definite answers to all questions asked, but the number who failed to answer any particular query may be seen by reference to Table 1 on pages 16 and 17. The chief item of expense for the market gardener is that of labor, which in almost every farm visited was found to be over \$2,000, and reached as high as \$20,000, though for 12 of the 21 reporting the expense for labor ranged from \$2,000 to \$5,000. For 11 of these gardeners the annual labor cost per acre ranged from \$100 to \$500, for 4 of the 6 who had no greenhouses the range was from \$100 to \$200. The increased labor cost due to greenhouse cultivation is shown in the fact that 7 of the 14 reporting greenhouses spent from \$100 to \$500 per acre for labor, 10 of them spending on an average from \$500 to \$1,000 on labor for each greenhouse. Other expenses which the market gardener has to consider are the amount to be paid each year in repairs, for fertilizer, coal, water, taxes, and feed for horses and cattle. Table 1, above, indicates the general amount of these separate items, which naturally vary according to the amount of glass in use in hotbeds or greenhouses and the number of horses and cattle. It is of particular value, however, to note that the general expense for carrying on a market garden is high. That the labor cost is by far the most important item of the total expense is seen from the fact that 5 of the 23 reporting expenses gave their labor cost as from 40 per cent. to

50 per cent. of the total annual expenses, 8 gave it as from 50 per cent. to 65 per cent., and 5 as from 65 per cent. to 75 per cent., while 1 reported the expense for labor as 91 per cent. of the total.

Keeping in mind the yearly expense in a market garden, most of which must be paid out of capital, it becomes important to notice the amount of capital invested and the returns received each year. In making this study, the question was asked as to the amount of capital invested when the business was first started and the present capital. These data are extremely difficult to secure, farmers hesitating to make definite statements. Many men inherited the home farms, and so can only estimate the value of the farm at that time. It is this indefiniteness of knowledge of investment which makes so uncertain and unsatisfactory any attempt to estimate the financial worth of the business. There are a few significant figures which may be offered, however. Of the 16 who stated the amount of capital invested, 11 had under \$10,000 at the start, while but 7 had under \$5,000, and only 1 had over \$25,000. The size of farm to-day is shown by the fact that 11 had from \$10,000 to \$50,000 invested, 5 had under \$10,000, and 5 over \$50,000, the lowest capital being \$5,000, as reported by 3.

The exact figures for returns and profits were also difficult to secure, both because of the lack of accurate book-keeping and because of an unwillingness to give exact figures. Although gross returns of 7 of the 16 gardeners reporting this item fell between 50 per cent. and 60 per cent. of the capital invested at the time of the interview, 5 reported their returns as from 75 per cent. to 90 per cent. of their capital, and 1 reported them as 100 per cent., yet only 5 of the 16 reporting a profit estimated it as high as 50 per cent. of the returns, and 10 reported profits between 20 per cent. and 40 per cent. of the returns. Three reported losses, and 1 only a bare living, from their business. All complained that profits had been reduced to a minimum in the past few years.¹

¹ The per cent. of returns on investment is not given, as living expenses are usually included, and such a statement would give an erroneous impression. The proportion of gross returns to investment and profits to returns will, we hope, be of service.

OUTLOOK IN THE BUSINESS.

Having learned from men of experience some details of the business of market gardening, let us study the subject with a view to discovering the outlook in the business. All of the men interviewed admitted that in the past market gardening had offered splendid opportunities to those trained for or experienced in the work. They said men had grown rich from the proceeds of a few good years. It was a common occurrence for an experienced man to begin with little capital, and in one or two years have his plant paid for or build himself a house from his profits. But only 3 were willing to call market gardening a good business at the present time. Five said it was fair in good years, 15 said it was very poor, and four made no definite statement, but implied that the outlook was poor. The reasons for this change are important. Nine men explained it as due to competition with the South, and in fact with the whole world, resulting from improved transportation facilities. They claimed that the gardener in warmer climates is able to market his produce earlier than the local gardener, so that, when the Massachusetts vegetables are ready for market, people have already been supplied for some time. Thus the high prices for early vegetables are not secured by the local gardener.

In the past the market gardener of the North could expect a southern frost every two or three years, and, when it did occur, his returns were so much increased that he could live on the profits, if necessary, until another frost came. But, as the Southerner learns to guard his produce from early frosts and as southern vegetables become more an assured fact, the northern market gardener feels more keenly the competition, though as one gardener said, "Probably so long as frosts are disastrous in the South even once in 10 years, so long will men still continue to go into the business, and hope to make in that 1 year enough to compensate for 9 poor years."

Competition has been increased recently by the arrival of Italians and Armenians, who are buying small farms near the cities and starting market gardens. Two or three years ago about 100 of these foreign market gardeners were bringing produce

to the large city market occasionally, while to-day, according to the superintendent of one of our large markets, there are over 1,000 who bring supplies at regular intervals during the season. It is difficult to appreciate the full significance of this foreign competition for the American gardener until one considers the difference in standards of living. The American gardener has an expensive family to support: his sons and his daughters must be educated, his wife must have maids to assist in the work of the farm-house. He must hire all help needed in carrying on the work for definite hours each day. On the other hand, the Italian or the Armenian, who was a trained gardener in his own country, comes over here and works for a season or two for the American, until he learns how to carry on an American market garden. Meanwhile he buys a small piece of land. His wife and children all work upon it. They never consider hours of labor. Their life is very simple. The entire family is able to live almost on the vegetables discarded by the American. So serious has this kind of competition become that one market gardener, who has a large, well-equipped plant, said that he had entirely given up raising early peas and beans, because he could not compete with the Italians and Armenians.

Another discouraging feature in market gardening is its seasonal aspect. The farmer depends so largely upon climatic conditions for the growth of his plants and maturing of his product that the changes of a New England climate are very trying. If his produce is ready just at the time when the market is overstocked, he either has no sale for his goods or must sell at very low prices. The business in this respect is much of a lottery, for, while one year the farmer may make a considerable sum on one kind of vegetables, he may lose an equal or greater sum the following year on the same thing. For example, one man said that one year his profits on cabbages were good. The next year he raised a large crop, expecting to do the same, but, apparently, everybody else had raised cabbages. The market was overstocked, and he made very little above his expenses.

Not only are competition and the seasonal aspect of the business given as reasons for the poor outlook, but the increasing amount of capital necessary to conduct a plant. If the garden

be located near the market or in the suburbs of a large city, the land valuation has increased so much that taxes minimize the profits. If, on the other hand, the market garden be in the country, at some distance from the market, the expense of transportation is very great. All expenses of the farm have almost doubled in the last few years. Thus expense for repairing wagons and shoeing horses, as well as the increased cost of feed for the horses and the higher wages demanded by laborers, make it necessary to have not only a large invested capital, but also a large working capital.

The labor problem is of serious moment to the farmer. All men in every line of work complain of the difficulty in securing reliable help, and even for unskilled labor short hours and high wages are demanded. Some market gardeners have attempted to solve the problem by employing women, but this is possible only for certain kinds of work. Several men said they were trying the experiment of hiring skilled labor at higher prices, hoping in this way to accomplish the same work with fewer men, but were unable to tell how the plan would work out. But one woman was found engaged in market gardening, and therefore judgment of the opportunity for women must depend on the opinions of men rather than upon the experience of women.

OPPORTUNITY FOR WOMEN.

In a business offering such a sombre outlook for men, it is not surprising that 19 men who were questioned said there was very little hope for a woman to succeed in the business. Besides the reasons given above, these men stated that women are not physically strong enough for the work, which demands being out in all kinds of weather and doing all kinds of very heavy and very dirty work. Because of the difficulties in securing help, they felt that a woman might be forced to do a good deal of the work herself, and for this she was not fitted. Even if able to secure laborers, two men felt sure a woman would be unable to manage such help as she must get, both because of their ignorance and because of their unwillingness to be managed by a woman. Another difficulty which a woman would encounter is marketing

the produce after she has grown it. Three alternatives seem to be open to her: either she must sell her produce to a commission house, where at best she would receive only 80 per cent. of the market value; or she might go to the general market herself, but because of conditions there this would seem unwise; or she might hire a superintendent to take her produce to the general market. The latter would require a large business to support the high wages of a reliable superintendent, and even then she would be competing with men who were selling their own produce. Any one of these courses seems difficult, and, though in special cases the obstacles might be overcome, yet in every case they would constitute a serious handicap.

From the reports given above it would seem that market gardening on a large scale offers little opportunity for women, but for a woman situated near a small market the field might be good. She might cater to a small local trade, where she would receive high prices for fresh vegetables. Here the personal relation to her purchaser would be important. She could well combine with vegetables small fruits or flowers or poultry, and by careful and attractive packing and arrangement of her products work up a trade as large as she could well manage and one which would bring her in a very good income. The possibilities of combining different lines of agriculture for a local trade will be considered further in later studies. Thus a woman whose chief interest is orcharding, floriculture, nursery culture, or poultry raising, might find it more profitable to combine the two lines than to follow one only. From such a possibility rather than from the present outlook for successful independent market gardening a woman may be encouraged to consider this among other phases of agriculture, when confronted with investment of capital or development of property. Especially, therefore, should market gardening be recognized, when deciding the problem of agricultural training and outlook for the girl on the farm, not as an independent occupation nor as a partial or avocational industry, but as subsidiary to other forms of agriculture.

FRUIT GROWING

INTRODUCTION.

Fruit growing offers probably the best opportunity of anything in the agricultural line. It is only within a few years that the public has been awake to its possibilities as a separate industry. Formerly New England orchards were left to themselves without care or cultivation, though many farmers seem to have realized that in a fruit year their orchards were the most lucrative resource of the farm. Within the last 10 years, however, through the efforts of the agricultural colleges and agricultural papers, the possibilities of New England orchards have become more generally known, and an intelligent effort has been made to develop fruit growing as a separate industry. Commercial orchards have been set out, and old orchards have been pruned and fertilized. Even in the few years since orcharding as a business began, the results indicate what may be expected from further development both of the orchards and of the markets for New England fruit, and prove the value of learning from men now in the business how they began their orchards, what training they had for this work, how large a plant is necessary to bring certain returns, and what conditions of labor and capital they are finding. Because the industry is so new as a commercial enterprise, it has been possible to study only 14 instances where fruit growing is the main business of the farm, though on many other farms the old orchards are being cultivated after modern methods with very good results. From these few instances one may discover the opportunity for women in this field.

As a business proposition, fruit growing may be developed in two ways. Either a new plant may be started, with young trees set out according to the latest methods, pruned, sprayed, and fertilized carefully to secure perfect adult trees, or old orchards may be renovated. The former method has been followed in three instances studied, and, while the trees are not yet old enough to yield a full crop, the results indicate that excellent returns may be expected. By following this method, a location favorable for fruit growing and also for a satisfactory

market may be secured. The entire plant may be developed along the most accepted lines as to amount and character of fertilization, cultivation between trees or the best plants to grow near the young trees, and rotation of crops to secure the best growth and development of the young trees. From these suggestions it will be seen that to start a new commercial orchard demands thorough training in modern methods, which may be secured at the agricultural colleges. The plan followed in the majority of cases is an adaptation of modern methods to old orchards. This gives much quicker returns, but involves a heavy expense in getting the old trees into good condition to produce perfect fruit. In spite of the fact that the trees are old and ill-shaped, often half dead, it has been found possible by careful and intelligent pruning, frequent spraying, and heavy fertilizing to get good returns from trees 40 to 50 years old.

Since neither the farmer who has an old orchard nor the man who has become interested in fruit growing, and has bought an abandoned New England farm, has had training for this work, the custom has been to hire an expert to prune the orchard and recommend what care be given it. In this connection it is interesting to notice that all the men visited who have developed their old orchards were born and brought up on the farm, and have an experience through many years of general farming. Five of these men had taken courses at agricultural colleges, one had gained some knowledge of recent methods by reading and study of the fruit bulletins issued by the colleges, and all had called in experts to guide them in the development of the orchard. All were enthusiastic over the possibilities of this work. In the majority of cases the main fruit grown on these farms is apples, but on 6 farms all large fruits, such as pears, peaches, plums, cherries, quinces, and apples are raised, while in one instance peaches are the only crop.

GENERAL CONDITIONS OF THE BUSINESS.

To develop a large orchard demands more land than some other lines of agriculture, for example, market gardening where

intensive farming may be done. The man or woman who wishes to start a commercial orchard should not consider a farm of less than 25 acres, with an orchard or group of orchards of about 500 trees. He should also have land available for fruit trees, where he could set out new trees and so increase his orchard in time to 3,000 or 4,000 trees. Many farmers have started with a small orchard of 25 to 100 trees, and have been able to get unusually good results. In the cases studied, however, most of the old orchards which have been renovated contained from 100 to 500 trees, though an occasional orchard was composed of several thousand trees, and one had as many as 42,000. On all of these farms young trees had been set out, varying with the amount of land available as well as the amount of capital.

The problems of labor and capital which confront the fruit grower are quite distinct from those seen in market gardening. Fruit growing demands few laborers save in the picking season, and for this reason may be considered a more desirable occupation for women. The early spring pruning and spraying can be done by the regular men on the farm, under careful and intelligent direction; but for picking, sorting, and packing the fruit many additional men are needed. The number employed on the different farms is given, but in each case it is necessary to add that extra help was hired during the season, as needed. Quite contrary to the condition in market gardening, it is comparatively easy to secure men for fruit picking. The season is short and comes at a time when other work for men is dull, so that many Americans as well as foreigners are glad of the extra work. The daily wage paid by 6 men varies from \$1.50 to \$2. If paid by the week, the average wage is usually \$10. Six farmers paid by the month sums varying from \$16 to \$25 with board, or \$40 to \$60 without board. There is little opportunity to use women in the fruit orchards except in the picking of small fruits, which in this study has been classed under regular market gardening.

**NUMBER OF SUMMER LABORERS EMPLOYED BY FRUIT GROWERS
INTERVIEWED.**

None (regularly)	1
1 to 5 laborers	7
6 to 10 laborers	1
11 to 15 laborers	3
21 to 25 laborers	1
150 to 250 laborers	1

It is very difficult to give any accurate statement regarding the capital necessary to carry on a fruit farm, because the amount of expense depends so directly upon the condition and age of the trees. The expense for pruning large old trees is reckoned at from 25 cents to 50 cents a tree, while the spraying costs from 10 cents to 50 cents. For young trees the expense for pruning is from 2 cents to 5 cents, and the spraying about 10 cents per tree. The estimate of expense per tree for fertilizer varies from 1 cent for young trees and 5 cents for bearing trees to as high as 50 cents for an old tree. The average cost, however, is probably between 10 cents and 15 cents per tree. Picking and packing the fruit is another large item of expense, and is estimated at from 15 cents to 25 cents per barrel.

In Table 2 given herewith the expenses of the fruit farms have been estimated by farms. In two instances the general expenses amounted to less than \$1,000 for a farm of about 100 trees; in one between \$2,000 and \$5,000 for from 1,000 to 4,000 trees; in three between \$5,000 and \$7,000 for 3,000 to 16,000 trees; while in one very large farm the expense was from \$12,000 to \$16,000 a year for over 42,000 trees. These figures, while of necessity more or less indefinite, yet show that the expense of conducting a fruit farm is proportionately less than that of a market garden.

It is difficult to state how much capital one would need to *start* a fruit farm, because one must often buy more land than is needed in order to secure an orchard of sufficient size. The location of the farm also affects the price of land. It may be helpful to note in the cases studied both the amount originally invested and the valuation at the time of the study, without presenting, however, the increase in capital by farms.

TABLE 2, SHOWING THE INVESTMENTS, EXPENSES, RETURNS, PROFITS, AND OTHER DATA REPORTED BY 14 FRUIT GROWERS VISITED.

(Data are given as suggestive only. Discrepancies often appear in totals due to variation in returns dependent on seasons and to incompleteness of accounts.)

Case-Number	Number of Acres in Farm at Present	Number of Trees Old	Number of Trees Young	Number of Years on Farm	Initial Capital	Present Capital	Total Annual Expense	Itemized Expenses			Annual Returns	Annual Profits		
								Labor	Pruning and Spraying per Tree	Equipment for Spraying	Picking and Packing Fruit			
1	40	100	—	6	Inherited	\$3,500	\$300 to \$400	—	Spraying 3 times, 25 to 50 cents	\$15	15 to 25 cents per barrel	\$4,000	Good	
2	300 to 400	3,500	—	25	Inherited	—	\$2,500 to \$3,500	\$11,000 to \$11,500	10 to 25 cents	—	10 to 25 cents	\$6,000	—	
3	300	500	—	1½	—	—	—	\$900 to \$1,000	Included in labor	\$25	Included in labor	\$1,200	Met expenses	
4	225	100	15,000	1	\$8,000	—	\$6,000	\$2,000 to \$2,500	Pruning, 25 cents, large trees; 2 to 5 cents, small; spraying, 10 to 50 cents	—	15 to 20 cents	Young trees, 1 cent; bearing trees, 45 cents	—	
5	100	1,000	2,100	25	\$3,200	\$10,000	\$5,000	\$2,500	10 cents	—	—	\$1,000	—	
6	175	350	3,850	35	—	\$7,000	—	\$1,500	\$2.50	—	—	\$6,000	30 per cent.	
7	42	—	—	7 months	\$20,000	—	—	—	—	—	—	—	—	
8	100	100	400	40	—	—	—	—	—	—	—	—	—	
9	85	465	330	2	—	—	—	—	—	—	—	—	—	
10	200	3,000	—	40	—	—	—	—	—	—	—	—	—	
11	150	450	150	7	\$5,000	\$10,000	\$1,600	\$1,000 to \$1,000	20 cents	—	—	\$2,500 to \$3,000	\$675	
12	3,000	42,000	1,700	20	—	\$10,000 to \$20,000	\$12,000 to \$16,000	\$8,000 to \$10,000	—	—	—	\$20,000 to \$30,000	\$6,000 to \$10,000	
13	110	45	62	50	Little	\$10,000 to \$12,000	\$730 to \$940	\$500 to \$600	25 cents, young; 50 cents, old	—	25 to 50 cents per barrel	\$200 to \$300	\$10,000 to \$15,000	
14	150	500	2,500	18	\$50	\$10,000	—	—	\$1,200 to \$1,500	10 to 15 cents	—	—	\$300 to \$400	\$4,000 to \$5,000

CAPITAL INVESTED BY FRUIT GROWERS VISITED.

<i>In the Beginning.</i>	<i>At the Time Visited.</i>
Inherited land	2 \$1,600 to \$5,000 2
Under \$1,500	3 \$6,000 to \$10,000 5
\$1,600 to \$5,000	2 \$11,000 to \$15,000 1
\$6,000 to \$10,000	1 Over \$150,000 1
\$20,000	1 A large amount 1
Not stated	5 Not stated 4

Returns from fruit farms depend largely upon the season, and, though it is hoped by proper cross-fertilization to increase the fruit crop each year, at present the returns are more or less uncertain. Five of the fruit farms reporting returns were estimated as yielding an amount varying from almost \$1 to \$2 per tree, and the other 6 farms as yielding from about \$2.50 to \$4.50 per tree. The point which concerns the purpose of this study more, however, is the proportion of profits to these returns. These were estimated as between 25 per cent. and $33\frac{1}{3}$ per cent. by 4 of the 6 reporting profits, while in one instance the percentage was given as high as $66\frac{2}{3}$ per cent. profit and in the other as less than 20 per cent.

OUTLOOK IN THE BUSINESS.

Turning from the study of detailed conditions in fruit growing to the future of this branch of agriculture, we find a great contrast to the outlook in market gardening. Fruit growing seems to have a bright future in New England. The soil is well adapted for fruits of all kinds, the markets are available, and the problems are those which naturally arise in developing any new business. Fruit growing offers a possible way of escape from the unfortunate conditions in market gardening. It will always be closely allied with gardening because, in order to secure the best results from the orchards, the soil must be cultivated. This means that vegetables and grain may be grown to advantage while the trees are young and even after they begin to bear fruit. Fruit growing offers also a hope to the dairy farmer. As will be seen in another study, the outlook is not at all bright for the dairy

farmer. The fruit grower, however, needing much fertilizer for his trees, finds it most profitable to keep cattle.

The essentials for success in fruit growing from a commercial standpoint are a thorough knowledge of the best locations for the orchards, the kinds of fruit adapted to the locality, and the best methods of caring for fruit trees. The New England orchards have been neglected, and require wise pruning and fertilization to secure speedily good results. This knowledge may best be secured at the agricultural colleges or by study at home or by observation of the work of some one who knows the business. A certain amount of capital above the sum invested in the farm is necessary, though the individual may be able to adapt his efforts to the capital which is available. More essential than capital and co-ordinate with accurate knowledge of fruit growing is the necessity that the fruit grower have good executive ability. This is essential not only in securing his markets, but in picking and packing the fruit for market. The New England farmer has been careless of the opportunities in this line, offering poor fruit and poorly packed fruit in local markets, so that the prices have been kept low for his fruit. The fruit grower of the future must be able to establish and maintain a high reputation for the excellence and superiority of New England fruit in order to be able to compete with western products.

OPPORTUNITY FOR WOMEN.

While it is generally admitted that fruit growing offers a good opportunity for men, there is difference of opinion regarding the field for women. This is due mainly to the necessity for thorough training and experience, which men fear a woman could not secure, and to the necessity for hard work of a nature unsuited to her. If she be content to hire men to do this heavy work and confine her efforts to supervising work in her orchards, the question arises as to her ability to manage men. It is impossible to reach any positive conclusion as to the validity of these objections. In every case it would depend upon the individual woman and her ability to overcome the difficulties. Provided a woman is strong and able to manage men, she can easily

get a theoretical training at the agricultural colleges and work out her experience for herself. If she is able to do this, 7 of the men interviewed conducting fruit farms said a woman would have as good an opportunity as a man. The business demands careful attention to details in pruning, spraying, picking, and packing fruit, for which women are naturally well fitted. The woman with business ability and a love for orcharding may secure returns from a fruit farm after a year or two by starting small fruits, such as currants and berries, among her young fruit trees. She may also combine with this poultry raising or bee keeping, to assist in the fertilizing of her fruits. The field here is large, and offers abundant opportunity for a woman of ability to develop a large and profitable plant.

The approach to the industry for the woman seems to come in one of three ways. First, the mature woman with small or large capital in available money or in real estate may secure training in an agricultural school, purchase land or an orchard in small or larger amount, and begin the development of the property. Second, the woman with capital or with real estate may begin on a small scale, secure an expert to prune her orchard, and advise her with regard to spraying and fertilizing, and thus, having secured experience in lieu of training, she may continue to develop her orchard. Third, and one which commands attention because in it may appear a solution of the problem for the young girl on the farm and may satisfy a demand both industrial and social, training may be given the farmer's daughter who is looking forward to passing her mature years on her own estate or to married life on a farm. The girl, given a certain amount of training in pomology, together with elementary work in other lines of agriculture, may begin work on the farm, with her father's aid and a small investment, and may develop interest, skill, and a productive business. Especially in orcharding does the average New England farm offer chance for intensive but gradual development.

The range from small to large capital, and the more definite knowledge of expenditure and probable returns which we have been able to secure, seem to augur better opportunity for women in pomology than in many other phases of country occupation.

Thus the expense per tree for pruning, spraying, and fertilizing is about 50 cents to \$1.50 for old trees and 15 to 20 cents for young trees in addition to 15 to 25 cents per barrel for picking and packing the fruit. This possibility of reducing the expense to a unit per tree is apparently of great advantage. The evidence seems to show the possibility of beginning with 25 to 100 trees, and the necessity of developing to 500 trees at least before much commercial advantage is reached, while it is apparent that 1,000 trees are necessary for an income approaching independence.

GROWING FLOWERS FOR THE MARKET

GENERAL CONDITIONS IN THE BUSINESS.

Growing flowers for the market and nursery culture might be grouped together, not because they are usually carried on simultaneously, although this is practical, as are market gardening and fruit growing, but because in general they have in America the same conditions and similar difficulties. In each case the outlook depends almost entirely upon the ability of the individual to secure sufficient training and experience and to find a market for his product. Here the similarity between the two kinds of work ends. It is therefore necessary to study each as a separate occupation.

In the following study, which is based upon interviews with about 25 men and women engaged in this business, it has been possible to secure definite figures from only 16 people, and even here accurate answers could not be given in every instance, as will be seen by the tables.

The boy who grows up in the work, beginning as an apprentice or errand boy in some large greenhouse, secures training and experience, and after 10 or 15 years of actual practice with plants, learns enough to be able to start a small plant for himself. But for young men or young women the course is less easy. At the various schools and colleges they may be able to secure a thorough scientific training in floriculture, but without actual experience there is considerable risk in making a beginning. In

the instances studied, 6 men began as young boys, and 3 worked for others from 5 to 15 years before starting for themselves. Seven others began in a small way, without training or experience, and developed the plant as they gained experience. The length of time these men had been in business is shown by the following table:—

LENGTH OF TIME IN THE BUSINESS AS REPORTED BY FLOWER GROWERS
INTERVIEWED.

2 to 7 years	8
7 to 15 years	5
15 to 30 years	6
40 to 50 years	1
Not reporting	1

The majority of men in floriculture have learned that the best results are secured by specializing in one line of plants. For this reason it is interesting to notice that only 4 had general greenhouses, while 2 were growing only roses, 2 violets, 2 sweet peas, and 6 grew ferns, azaleas, and orchids. Nearly all of these men cultivated also in their greenhouses spring bedding plants for the farmers, some raising all kinds of flowers outside, and 4 specialized in bulbs and dahlias. The amount of land in use varied considerably, from a small town or village lot to 20 acres, but the majority owned 3 acres or less. A comparison of the number of greenhouses in use is not very satisfactory because of the difference in size. For example, 1 man has a rose house which covers about half an acre, and is 350 to 500 feet in length, while some of the violet houses are less than 100 feet in length, and one of the smallest houses is 20 by 40 feet. The houses vary also in width, so the figures given below can be of value only as a general suggestion as to the size of plant possible:—

NUMBER OF GREENHOUSES OWNED BY FLOWER GROWERS INTERVIEWED.

2 greenhouses	2
3 to 5 greenhouses	3
5 to 10 greenhouses	3
10 to 15 greenhouses	2
Over 40 greenhouses	2
None	2
Not reporting	2

The care of flowers demands many laborers, so that in large greenhouses the labor problem requires consideration, as in other lines of agriculture. The number of men employed ranged from about 5 to 30, though one-half of those questioned had fewer than 10 men. Men of all nationalities are found in the work, with preference shown for English, Scotch, German, and Italian. A few American women are employed to pick violets and sweet-peas during the season at about \$1 per day. The average wage for men is from \$1.50 to \$2 for the ordinary laborer. The superintendent and the foreman receive, in proportion to the size of the plant and the responsibilities which they have, up to \$5 per day.

The expenses in greenhouses are similar to those found in market gardening,—for labor, repairs, fertilizer, taxes, coal, and water.

The expense for labor is the largest item, and fell between \$350 and \$500 per greenhouse for 4 of the 10 growers reporting labor cost, and between \$600 and \$750 per greenhouse for 3 others, while 2 growers reported \$1,125 and \$1,727 per greenhouse, respectively. As the tenth grower did not report the number of greenhouses, the labor cost per greenhouse could not be estimated. Other costs ranged from \$250 to \$400 per greenhouse for 6 of the 11 reporting, while one reported \$958. There is a heavy expense in greenhouse work in keeping the houses in repair. This includes new glass and frequent painting of houses with wooden frames and wear and tear on the plant. Many of the newer greenhouses are being built of steel, and while the original expense is heavier, the building wears longer. The expense for repairs seems to range from \$100 upward. Another considerable expense is that for soil and fertilizer.

Since greenhouses have to be located near the city market, taxes are usually very high. Two men said they paid from \$100 to \$150, and 3 from \$200 to \$400, while in 1 case the taxes were above \$2,000. The amount of coal and water used depends very largely upon the character of the plants. For example, violets need very little heat, so that the expense is much less than for rose houses, where a good deal of heat is required. Of those who gave figures regarding the expense for coal, 2 said it was \$450 to \$600,

3 said \$1,000 to \$1,500, and 3 from \$3,000 to \$5,000. In most cases the water bills are slight, from \$35 to \$125, but in 1 or 2 instances where meters are used the cost amounts even to \$500 or \$1,000. It was estimated that the average total expense for a greenhouse is about 50 cents per square foot. Several people gave from \$700 to \$800 as an estimate for the first cost of a

TABLE 3. SHOWING THE INVESTMENTS, EXPENSES, PROFITS,
(Data are given as suggestive only. Discrepancies often appear in totals due

Case Number	Size of Farm	Number of Greenhouses	Number of Years in Business	Number of Laborers	Initial Capital	Present Capital	Total Annual Expenses
1	125,000 square feet	11 (each 200 to 500 feet long)	11	3 to 5	\$4,000 to \$5,000	\$10,000	\$20,000 to \$25,000
2	—	8 (150 x 20 feet)	17	7 to 8	\$6,000 to \$8,000	\$10,000 to \$15,000	\$7,000
3	—	2 (150 x 40 feet)	5	2	\$10,000	—	1
4	Town lot	2 (20 x 40 feet) (18 x 50 feet)	10	2	Very small	\$3,000	\$250
5	—	None 1,100 bulbs outside	7	1	—	—	—
6	—	12 large	25	12	\$15,000 to \$20,000	\$70,000 to \$80,000	\$15,000 to \$25,000 ²
7	½ acre	None, 1,000 bulbs outside	15	1	\$250	\$1,250	—
8	Town lot	—	15	5 to 6	—	—	\$200
9	20,000 square feet	6 (120 x 20 feet)	7	3 to 4	\$15,000	—	—
10	1 acre	2,000 to 3,000 bulbs outside	2	1	\$1,500	\$5,000	—
11	—	Many, very large	40 to 50	10 to 20	\$1,100	\$100,000	\$10,000 to \$14,000
12	2 acres	9	5	8	—	\$18,000 to \$20,000	\$8,500
13	—	4	—	—	\$6,000	—	—
14	20 acres	40	25	30 to 40	—	\$300,000	\$25,000
15	½ acre	4	12	8	\$500	\$7,000	\$6,000
16	3 acres	4 (150 x 25 feet)	23	3 to 5	\$600	\$10,000	\$3,000

¹ Chief expense is in getting bulbs.

² Bad bills amount to \$1,000 to \$2,000 per year.

small violet house, and \$1,200 for a general greenhouse requiring better heating facilities and to be more firmly built.

As has been suggested, most of the greenhouse owners visited have worked into the business gradually, starting a small plant for themselves and developing it, as they were able to work up a market and secure perfect flowers. The following table is use-

AND OTHER DATA REPORTED BY 16 FLOWER GROWERS VISITED.

(to variation in returns dependent on seasons and to incompleteness of accounts.)

ITEMIZED EXPENSES						Annual Returns	Annual Profits
Labor	Repairs	Fertilizer	Water	Coal	Taxes		
\$18,000 to \$20,000	Included in labor	\$1,500 to \$2,000	—	—	\$2,000 to \$3,000	—	10 per cent. in good year
\$4,000	\$100	\$1,600 to \$1,800	\$60	\$1,500	—	—	\$1,500 to \$2,000, 10 per cent.
\$1,500	—	—	—	—	—	—	—
—	—	—	—	—	—	\$750	25 per cent.
—	—	—	—	—	—	\$1,000 per acre	—
\$8,000 to \$9,000	Several hundred	—	\$1,000	\$2,800 to \$3,000	—	—	15 to 25 per cent. of investment \$600
—	—	\$8 to \$10	—	—	—	—	—
\$200 \$2,000	—	\$150 to \$200	\$36	\$1,000	\$100	\$30,000	\$600 25 to 50 per cent.
—	—	—	—	—	—	—	6 per cent.
—	—	—	\$700 to \$800	\$5,000	—	\$16,000	25 cents a square foot
\$6,000	\$100	\$500	\$125	\$1,200	\$300	—	5 per cent. of investment 3
\$15,000	—	\$1,500	\$250	\$4,500	\$150	\$55,000	\$15,000 to \$20,000
\$4,500	\$400	\$200	\$50	\$450	\$200	\$18,000	—
\$1,500	\$400	\$100	\$100	\$600	\$350	—	\$1,000

* Borrowed \$6,000 at 9 per cent. interest to start. Paid it all back in 6 years.

ful only to show the actual capital in use by flower growers formerly and at present:—

AMOUNT OF CAPITAL INVESTED BY FLOWER GROWERS INTERVIEWED.

	<i>In the Beginning.</i>	<i>At the Present Time.</i>
Under \$700	4	\$1,000 to \$5,000
\$1,000 to \$1,500	2	\$7,000 to \$10,000
\$4,000 to \$8,000	3	\$15,000 to \$20,000
\$10,000 to \$15,000	2	\$70,000 to \$80,000
\$15,000 to \$20,000	1	\$100,000
Not reporting	4	\$300,000
		Not reporting

As in other lines of industry, men estimate the returns and profits in the business variously. Three of the 6 who gave estimates of returns reported them as under 25 per cent. of the capital invested and 1 reported them as 257 per cent. Profits were estimated by 3 of 13 reporting as under 25 per cent. of the returns, while 4 gave profits as from 25 per cent. to 50 per cent. of the returns. Three were unable to give any estimate, they said, because they usually turned the profits back into the business. Profits also depend very much upon the season, so that no statement can be accurate. In this business, men expect to receive from 25 to 30 per cent. on the capital invested, but 3 men said they received only 5 to 6 per cent., 4 from 10 to 15 per cent., and 4 from 15 per cent. up. Apparently, 10 to 15 per cent. is the maximum profit which horticulturists dare to count upon. Table 3, which is given for comparison, shows that in many cases it was impossible to secure full statements relative to capital, size of plant, expenses, returns and profits, but it will serve as a guide to trace the relation in those cases given.

OUTLOOK IN THE BUSINESS.

Although unable to give exact figures regarding conditions of the business, all of those engaged in greenhouse work were very willing to express opinions relative to the future of floriculture. Only 2 men said conditions were unsatisfactory; 5 said it depended

upon the season and upon the market; 9 said positively that growing flowers is a good business. It is valuable to notice some of the reasons for lack of confidence. 1. At the present time, owing to the high prices of building materials, much more capital is needed to start a greenhouse than was required a few years ago. 2. The property depreciates rapidly, and if a person is not successful in the business, a forced sale brings very little for the plant. 3. Competition is so keen that few men would dare start a plant without some practical experience in a greenhouse, which, as has been shown, is difficult to secure. 4. Flowers are a luxury, and while in prosperous years the sale grows rapidly, in times of panic or business depression this is one of the first lines of business to feel the retrenchment of expenses. 5. Retailers are often unable to meet their bills, and the loss to retailers and wholesalers alike is heavy. One firm stated that last year it lost between \$2,000 and \$3,000 from this cause. 6. Flowers grown in the open garden are so dependent upon conditions of climate that the loss may often be heavy. A rain or fog may ruin the flowers just at the height of the season, and the gardener must wait until new flowers are grown.

The majority of floriculturists feel, however, that in spite of the difficulties the outlook for the future is bright. Flowers are coming to be less of a luxury and more of a necessity in homes of the middle class. The statement of one man is significant. "There is always a demand for perfect flowers, but you can't give away poor flowers." While competition is keen, conditions have never been so favorable for the small grower. He may take advantage of the general flower market, and has equal opportunity to sell his flowers if they be perfect. The florists come each morning to the flower market, where they secure their flowers for the day and choose from those displayed at the regular market price. Another aspect of the business which points to a hopeful future is the change from general culture in greenhouses to a special product. This means economy of labor and a better flower, because conditions of heat and moisture may be controlled to meet the exact needs of the plants, and opportunity be given to study and experiment with flowers in the hope of finding a new variety which shall meet public favor and bring large

financial returns. As in every business, it is not to be overlooked that successful flower growing depends largely upon the ability of the individual to overcome the difficulties of the work and to take advantage of the growing demand.

OPPORTUNITY FOR WOMEN.

The difficulty of securing training and experience in the greenhouse itself is the chief obstacle to a woman in this line of work. Even though she have a scientific knowledge of flowers, she cannot do the heavy work demanded from an apprentice nor can she be relied upon for the work which demands skilled hands. In few greenhouses is a woman permitted to gain experience, so she is practically forced to rely upon her own efforts and to start a small plant where she can learn by doing. This is not at all impossible, and a number of successful women have been found who began in this way. Several women interviewed began by growing dahlias and asters in the open garden, then building a small greenhouse, and finally working up a large business. For the woman who, either in her own greenhouse or elsewhere, has secured the necessary experience, it is possible to buy or start a large plant. Here she would require laborers to do the heavy work, and might meet the difficulty of managing men of this class. The work seems to have a particular charm for many women, and they have already proved that they can carry on successful greenhouses.

Among the women floriculturists interviewed one lived in a small town and had built several greenhouses, from which she supplied the demand of the entire town. She had developed also a considerable market garden trade and had several acres in nursery stock. Another woman started her greenhouses for pleasure, but at her husband's death continued it on a commercial basis. She found that her special ability lay in floral decoration, so that she made herself an authority in this line and received many prizes for her work at horticultural exhibitions. One woman of means devoted her attention to the study of hardy roses in this country and abroad. At first this was done as a pleasure, but later under financial reverses she turned her knowl-

edge to account and was able to secure a large clientèle of people who wished her to care for their rose gardens. Several women who were kept at home increased their incomes considerably by growing dahlias. The best opportunity here lies in securing new varieties and selling the bulbs, although it involves more or less advertising to secure a market. One woman, who lived in a town where there were many summer hotels and cottages, planted her gardens with sweet peas for which she found a ready market. Another woman grew lavender, and worked it up into attractive packages for sale to summer tourists.

For the woman with a greenhouse there is a splendid opportunity to grow spring bedding plants, such as tomatoes, pansies, geraniums, and asters. If she is near a large market, it is usually better to specialize on one kind of flowers, as, for instance, violets, with sweet-peas between rows so that they will be ready to blossom when the violet season is passed. There are numberless possibilities for a woman who loves flowers to work out some line for which she has a particular market, and she may combine the growing of flowers with small fruits and poultry raising.

Not only for the woman with large acreage and a fair amount of capital, but for the woman with a small country property, does floriculture alone or floriculture combined with other forms of agriculture yield an opportunity for a fair profit on investment of money and time. If a return ranging from 10 to 15 per cent. only can be relied upon, the small investment cannot yield an independent income. It appears that for the large or small investor dependent on her income the growth of flowers for the market must at first be combined with other forms of productivity, poultry raising, bee keeping, nursery culture, orcharding, or market gardening. For a partial independence or an avocation, no form of agriculture would seem more delightful.

The question of training and experience has been shown to be at present the most serious obstacle. Again the question arises as to whether the farmer's daughter or the girl growing up on, or with access to, farms or landed property, especially one whose taste and ability for plants and flowers has been proved, may not be given training through the schools, so that she may commence her experience at home on small beds grown in the open

or develop small hotbed flowers and thence expand the business. The woman with such opportunity in girlhood would have overcome the difficulties preliminary to conducting a plant of self-supporting size.

NURSERY CULTURE

GENERAL CONDITIONS IN THE BUSINESS.

In the following study the information was gained from interviews with 15 practical nurserymen, but full response to questions asked was received from 8 only. Although the figures are in themselves inadequate, they are given as suggestive at least. These, together with the conclusions based on conversation with the other 7, as well as with horticulturists who have had some experience, may, however, serve to show general conditions regarding the laborers necessary, expenses, capital, returns, and profits in the business. Seven of these men had been in the business from 3 to 10 years, and 5 from 12 to 25 years.

Nursery culture is closely allied to flower growing. Many nurserymen have greenhouses where they grow young plants and often flowers, while many florists naturally work into the growing of perennials and small ornamental shrubs to meet the demands of their trade. Just as was found in floriculture, so in growing trees and shrubs, the chief difficulty is to gain adequate training and experience. At least 12 of the men in the business secured the opportunity for experience through parents or had been trained in schools by foreign apprenticeship. Of these 7 were born and brought up on the farm, having had no training or experience outside; one studied in a horticultural school in Holland; another studied 2 winters at an agricultural college; still another was apprenticed for 4 years to an English firm; and 2 were Scotchmen and had grown into the work from youth.

The general product grown on the farms visited includes: general nursery shrubs, 6; ornamental stock, 5; evergreen trees and maples, 3; small fruits and hardy phlox, 1. Greenhouses are used for the young nursery plants, and plants are grown outside in varying amounts. From 5 to 20 acres seem to be

sufficient to secure adequate profits. The size of plants studied is shown by the following figures:—

(1) ACREAGE UNDER CULTIVATION BY NURSERY MEN INTER- VIEWED.	(2) NUMBER OF GREENHOUSES OWNED BY NURSERY MEN INTERVIEWED.
6 to 10 acres	4 No houses
15 to 18 acres	2 1 to 4 houses
23 acres	1 5 houses
30 acres	1 20 houses
40 acres	1 Not reporting
Not reporting	6

In nursery culture, as in general agriculture, the question of securing laborers is important. The work is heavy and requires great care, so that it is necessary either to secure competent help or to have careful supervision of the workmen, who are for the most part foreigners, either Italians or Germans. In the nurseries which were studied the number of men employed varied, as will be seen from the table, 9 nursery men hiring less than 8 men, while 1 had 15 to 20 men, and 2 from 30 to 50. One man hired 5 men in winter and 25 in summer; others employed men as needed. The wage paid was \$1.50 to \$2.50 per day. The item of greatest expense in this work, as in other lines of agriculture, is for labor. (See Table 4.) Six nursery men reported labor cost as from \$100 to \$200 per acre, and 2 placed it between \$300 and \$350. In only 1 case did all other expenses exceed \$250 per acre, in 4 cases they fell between \$50 and \$150, and in 2 cases under \$50 per acre.

The business demands little capital at the start, though as high as \$20,000 was invested by some of the men interviewed. Seven, however, began with less than \$3,000, but at the time interviewed only 1 man had under \$2,000, and 10 had from \$10,000 to \$50,000.

Returns were estimated by 6 of the 9 nurserymen reporting this item as from 40 per cent. to 60 per cent. of the capital invested, 1 estimated them as 85 per cent., 1 as 90 per cent., and 1 as 244 per cent. The profits, however, were given as only between 10 per cent. and 20 per cent. of the returns in 6 of the 8 cases

reporting, but in the 2 other cases between 25 per cent. and 50 per cent.

Fifteen to 20 per cent. of the capital invested in most cases was claimed as the fair and safe reward. Table 4, showing the relative capital, expenses, returns, and profits for each plant, as far as could be learned, is given below and may be useful for comparison with other industries.

OUTLOOK IN THE BUSINESS.

Men now engaged in nursery culture unanimously consider the outlook very good. The difficulty, as has been stated, is to secure

TABLE 4, SHOWING THE INVESTMENTS, EXPENSES, PROFITS,
(Data are given as suggestive only. Discrepancies often appear in totals due to

Case Number	Number of Acres in Farm	Number of Greenhouses	Number of Years on Plant	Number of Laborers	Initial Capital	Present Capital	Total Annual Expenses
1	30	5 or 16,000 square feet	60	8 to 40	\$3,000	\$45,000	\$12,500
2	23	—	8	3 to 5	—	—	\$8,000
3	18	None	5	5 to 6	—	\$10,000	—
4	10	None	—	6	\$300	\$10,000	\$3,500
5	6	None	8	2 to 4	\$2,000	\$5,000	\$3,500
6	40	None	70	15 to 20	Inherited	\$15,000	\$6,500
7	6	None	15	1 to 6	—	\$8,000 to \$10,000	\$1,500
8	4	2 small	10	1	\$1,000	\$6,000	\$1,800
9	15	—	23	2	None	\$50,000	—
10	—	3, or 3,000 feet	16	2	—	\$1,500	—
11	100	3	15	35 to 40	\$3,000	\$15,000 to \$20,000	\$25,000
12	400	5	10	40 to 50	\$20,000	\$40,000	\$75,000
13	—	4	7	3	\$1,000	\$10,000	\$2,500
14	10 to 14	1	12	None	\$100	—	—
15	1 to 10	20	3	23	\$3,000	\$50,000	—

¹ Duties, freight, stock, etc.

the necessary training. The best opportunity is that offered abroad for the boy 14 or 15 years of age, to serve an apprenticeship for 10 or 15 years on some large estate under a competent gardener. America has few large old estates where this is possible, and thus the problem of securing adequate training is very serious, although landscape gardening is coming to be more fully appreciated and there is an increasing demand for ornamental trees and shrubs. Most men now in the business have solved the difficulty by starting a plant of their own and learning by experience, but the business is not easy to get upon a financial basis, even if one have good training. Competition is very keen, and the man who succeeds must have energy and business ability

AND OTHER DATA REPORTED FROM 15 NURSERIES.

(variation in returns dependent on seasons and to incompleteness of accounts.)

ITEMIZED EXPENSES							Annual Returns	Annual Profits
Labor	Repairs	Fertiliser	Water	Coal	Taxes	Other Expenses		
\$10,000	\$300 to \$600	\$200 to \$500	\$60	\$400	\$650	\$1,000	\$20,000 to \$30,000	20 per cent.
\$7,000 to \$8,000	—	—	—	—	—	—	—	—
—	—	\$200	—	—	\$90	—	\$4,000	15 per cent.
\$1,100	—	\$200	\$50	—	\$100	\$2,000	\$6,000	\$3,000
\$1,200	\$50	\$140	\$10	—	\$150	\$1,000	\$4,000 to \$4,500	\$800 to \$900
\$4,500 to \$5,000	\$50 to \$100	\$100 to \$150	—	—	\$100	\$1,500	\$7,500	\$1,000
\$1,200	—	\$150	\$30	—	\$75	—	—	—
\$800	\$50 to \$150	\$30 to \$50	\$20 to \$36	\$160	\$65	\$500 to \$600	\$3,000 to \$3,500	—
—	—	—	—	—	—	—	—	—
\$20,000	—	\$500 to \$900	\$120	\$300	\$1,400	—	—	—
\$17,800	\$600	\$2,200	\$78	\$1,185	\$1,250	\$55,000 ¹	\$85,000 to \$110,000	\$9,000 to \$10,000
\$1,200 to \$1,500	\$150	\$75	\$35	\$475	\$155	\$200	\$5,500	\$1,400
\$10,000 to \$12,000	—	—	—	—	—	—	\$40,000 to \$50,000	\$4,000 to \$7,000

make the heaviest expense.

to develop the business. He is forced to advertise extensively, which often means a very heavy expense.

Nursery culture as a business enterprise has two distinct advantages, once these difficulties are surmounted. First, the work may be and often is developed in connection with landscape architecture. The nurseryman not only supplies the plants, but suggests the varieties and the scheme of gardening, or he may work in connection with a landscape gardener, providing the trees and shrubs desired. Second, the expense does not increase in proportion as the work is enlarged, as is usual in most other lines of work. For instance, the expense in cultivating a nursery of 10 acres is practically as great as that required for a plant of 23 or 24 acres. This is claimed to be true because the small nursery requires a certain number of men and horses to perform the work in the busy season. By careful planning these can do the work of the larger plant, when otherwise they would be forced to be idle.

OPPORTUNITY FOR WOMEN..

Although the business is generally admitted to be excellent for men, nearly all the men interviewed said it was quite impossible to state the opportunity for women. A woman entering this line of work would meet even greater difficulty than a man in securing adequate training. Besides this, she would be forced to do more or less of the actual work herself, in order to know when the men were doing the work properly. This means very heavy manual labor. If she were able to supervise men, she would be confronted by the difficulty of securing competent help, and, they said, would find it also difficult to inspire in these laborers confidence in her judgment and understanding. However, women have succeeded in nursery work. Some women have carried on the work successfully after the death of husband or father, thereby proving that the result depends entirely upon the individual woman. The best opportunity for a woman probably lies in growing small shrubs, such as Japanese barberries for hedges, where the returns have been known to be from \$800 to \$1,000 an acre. One nurseryman suggested that a woman

might grow Christmas trees, setting out young trees each year. It requires some years for sufficient growth, but in nursery culture all plants require time to develop. Another possibility for a woman is that of growing small ornamental plants, perennials and shrubs, for a local trade. She might combine with this, as has been done by some women, the care of small private gardens, supplying bulbs and plants and supervising the planting. Apparently the work offers possibilities for the woman of initiative and ability who has an interest in and love for plants, and if successfully carried on brings excellent financial returns.

POULTRY RAISING

INTRODUCTION.

The one line of agriculture which seemed to all farmers interviewed to offer exceptional advantages for a woman was that of poultry raising. This judgment is based upon the fact that the small poultry plant found on almost all farms gives good returns, and this has usually been the department cared for by the farmer's wife. The opinion given off-hand by all of these farmers is confirmed by the men and women who have specialized in poultry. The small poultry plant is comparatively simple to manage, but the large plant presents new conditions and demands definite experience in the business, a running capital of at least \$500 to \$1,000 in addition to that invested in the plant, an available market, and great care and attention to details. For the person possessing these qualifications the opportunity to start a small plant and develop it as rapidly as possible is unlimited.

GENERAL CONDITIONS OF THE BUSINESS.

The accompanying study with regard to capital, expense, and returns, as well as the general possibilities of the plant, is based upon interviews with 40 poultry keepers, both men and women, who are at present developing poultry plants on a commercial basis; and Table 5, giving the details of each case, follows. Although 5 of these men and women were born and brought up on the farm

and 6 had been interested in poultry from childhood, yet the remainder had no training and no experience when they began to keep hens. Most of them began with a few hens, usually less than 6, and allowed them to increase naturally in a few years to 200 or 300, enlarging the plant as seemed advisable.

NUMBER OF ACRES IN FARMS STUDIED.

1 acre and under	9
From 2 to 20 acres	9
From 20 to 50 acres	6
From 50 to 100 acres	6
200 acres	1
Not reporting	9

NUMBER OF HENS ON FARMS STUDIED.

Under 50 hens	11
From 50 to 100 hens	10
From 100 to 500 hens	13
From 500 to 1,000 hens	4
From 2,000 to 5,000 hens	2

It requires but a few years to establish a poultry business. However, of those interviewed in the present study only 6 had been engaged in the business less than 5 years. That the business is permanent and stable, giving regular and reliable returns, seems to be proved not only by the statements of these persons, but by the fact that the greater number of them, 27, had been in the business from 5 to 20 years, and 4 had been engaged in it from 30 to 50 years.

There are three possibilities for the poultry keeper. First, he may raise poultry for broilers and roasters, making every effort to have them ready in season for the early spring trade at unusually high prices, as was done in 16 cases studied. This branch of poultry raising has been particularly developed along the South Shore of Massachusetts Bay, so that the early poultry secured in that section is spoken of as the South Shore broilers. In this particular locality the advantages of a market at hand have been emphasized. Early poultry is raised on nearly every farm in that locality, but the commercial end of the business has been developed by one man for the entire section. By a system

which he has arranged, he buys from the farmers all poultry alive. This he prepares for market and sells in town to regular customers or stores, and so relieves the farmer of the difficulty of finding a market. The second possibility is that offered in raising fancy stock for exhibition and sale at high prices. Single birds which have secured prizes in these poultry shows have sold as high as \$100 and \$150. The eggs, too, from these birds are sold during the hatching season as high as \$5 to \$15 for a setting of eggs. At other seasons the eggs are sold at the ordinary prices, and the less perfect birds are marketed for general use. This line appears to offer more of interest to those able to appreciate fine points in poultry, and if successfully carried on is undoubtedly one of the most profitable plans. Third, there is the regular field of raising poultry for the eggs. This line has usually been carried on in the past by the small plant, and without attention to breeding, though now it is recognized that fine birds of superior breed produce the greatest number of eggs.

The number of helpers required in a poultry plant depends so largely upon the number of hens kept that no inclusive statement can be made. In general, however, it may be said that one person can easily manage from 50 to 100 hens with occasional help as needed. On even the largest plants studied only from 3 to 5 men were employed. This means that the labor problem with its anxieties and expenses may be practically eliminated from the business. By far the greatest expense is that of grain. This is variously estimated from \$1 to \$2.50 per hen per year. The following proportions given under the various estimates may perhaps be of value.

EXPENSES REPORTED BY POULTRY RAISERS VISITED.

<i>For Feed.</i>		<i>For Equipment.</i>	
Uncertain	4	\$5 to \$10	6
Under \$1 per hen per year . .	2	\$25	1
\$1 to \$1.25 per hen per year .	9	\$60	3
\$1.25 per hen per year . . .	4	\$150 to \$200	1
\$1.50 to \$2 per hen per year .	10	\$950	1
\$2 per hen per year	2	\$1,200	1
Not reporting	9	Very little	1
		Not reporting	26

TABLE 5, SHOWING THE INVESTMENTS, EXPENSES, PROFITS, AND
(Data are given as suggestive only. Discrepancies often appear in totals due to

Case Number	Number of Acres in Farm at Present	Number of Hens	Number of Years in Business	Initial Capital	Present Capital	Total Annual Expenses Exclusive of Interest on Investment
1	70	600	6	\$1,200	—	\$5,000 to \$6,000
2	Little	170	2	—	—	\$260
3	2	100	6	Inherited	\$200	\$225
4	70	500	17	—	—	\$600
5	1	25	17	\$20	—	—
6	25	39	1	\$50	\$50	\$60
7	1/4	75 to 100	4	\$150	\$250	—
8	1	60 to 80	15	\$40	—	\$60
9	2	80	13	\$250	\$250	\$37.50 to \$50
10	35	80	15	\$150	—	\$95
11	14	375	11	\$1,050	\$1,000 to \$2,000	\$2,000
12	Village lot	60	12	\$5 to \$10	—	—
13	—	200	7	\$25 to \$30	—	\$250
14	Little	50	40	\$25	—	\$50
15	20	300	5	\$60	—	—
16	75	200	5	\$50	—	\$250
17	6	100	8	\$1,000	—	\$100 to \$200
18	75	600	15	\$25	—	—
19	10	170	6	\$40	—	\$200
20	Little	12	2	None	—	\$15 to \$20
21	90	4,100	4	—	—	—
22	1	25	5	—	—	\$25
23	Little	25	17	\$5	—	—
24	35	250	24	\$5	—	—
25	13	600	30	\$50	—	\$2,000 to \$3,000
26	10	150	10	\$1,000	—	\$100
27	32	40	2	—	—	\$200
28	1/4	100	5	\$10	—	\$100
29	1/4	100	38	None	—	—
30	35	2,000 to 3,000	9	—	—	\$4,000 to \$5,000
31	Little	60	10	\$1	—	—
32	1/4	32	20	None	—	\$50
33	200	200	30	Little	—	—
34	Little	60 to 80	58	\$0.50	—	\$175
35	1/2	20 to 50	—	\$100	—	\$35 to \$85
36	8	50	10	None	—	\$175
37	Little	40 to 50	7	\$25 to \$30	—	\$40 to \$50
38	5	35 to 200	11	\$100	—	\$150 to \$200
39	Little	50	10	Little	—	—
40	90	44	6	\$100	—	\$100

OPPORTUNITIES IN AGRICULTURE

51

OTHER DATA REPORTED BY 40 POULTRY RAISERS INTERVIEWED.

variation in returns dependent on seasons and to incompleteness of accounts.)

ITEMIZED EXPENSES FOR				Annual Returns	ANNUAL PROFITS	
Labor	Feed per Hen per Year	Equipment	Other Expenses		Total	Per Hen
\$264, board	\$1.80	—	\$3,500 to \$4,000	—	\$1,500	\$2.50
—	\$1.50	—	—	—	—	—
\$50	\$1.75 to \$1.80	—	—	\$600	\$300	\$3
—	\$1	—	—	—	—	—
—	—	—	—	—	—	—
—	\$1.50	—	—	—	\$39	\$1
\$20	\$1.25 to \$1.50	\$5	—	\$100	—	—
\$1	—	\$0.50	\$1 to \$1.50	\$60	—	—
\$10 to \$15	\$1.25 to \$1.50	—	\$1 to \$1.50	\$75 to \$100	—	—
—	—	—	—	—	\$200	\$2.50
—	\$1.50	\$60	—	\$4,000	\$562.50	\$1.50
—	—	—	—	—	—	—
\$15 to \$20	\$1 to \$1.25	—	—	\$500 to \$600	\$200	\$1
—	\$1	—	—	—	\$150	\$3
—	—	—	—	—	\$300	\$1
—	\$1	—	—	—	\$350	\$100
\$50	\$2	\$150 to \$200	\$250	\$300	\$200	\$2
\$400	\$1.25	—	—	\$1,600	\$450 to \$1	—
—	\$1	—	—	—	\$750	—
—	\$2	\$950	\$15 to \$20	\$50	—	—
\$2,100	\$1.75 to \$1.80	—	—	—	\$4,100	\$1
—	\$1	—	—	—	\$87.50	\$3.50
—	—	—	—	—	—	—
\$1,000	\$1.50	\$1,200	—	\$500	—	—
—	—	—	—	\$3,000 to \$5,000	\$1,200	\$2
\$50	—	\$25	—	—	—	—
—	\$1	\$60	\$75	—	\$75 to \$2	—
—	\$1.20	\$60	—	—	\$100	—
—	—	—	—	—	\$600	\$6
\$800 to \$1,000	\$1.25	—	—	\$15,000	\$3,000 to \$3	—
—	\$1.10	\$10	—	—	\$9,000	—
—	\$1.50 to \$2.25	—	—	—	\$90	\$1.50
—	—	—	—	—	\$128	\$4
—	—	—	—	—	—	—
—	—	—	—	\$250 to \$300	\$90 to \$1.50	—
—	\$1.75	—	—	—	\$120	—
—	\$1.50	\$10 to \$100	—	—	\$50 to \$2	—
—	—	—	—	—	\$125	—
—	—	—	—	—	\$50 to \$1	—
—	—	—	—	—	\$75	—
\$10	\$0.50	\$10	\$50	—	\$200	\$4
—	\$0.70	\$9	\$10 to \$15	—	\$200 to \$300	\$1 to \$2
—	—	—	—	—	Double money	—

For equipment, incubators, brooders, etc., the expense is rarely above \$100 to \$200 per year. Six poultry raisers estimated their general expenses from \$15 to \$20 per year, 3 about \$75, and 2 from \$125 to \$200. One man, who had a plant of 2,000 to 3,000 hens, estimated his expense as about \$4,000, which included extensive advertising of fancy breeds of poultry.

Many men and women have worked naturally into this business, 5 starting with a few hens which were given them, while 19 invested less than \$100 in the business at first. Only 6 estimated their original capital at from \$100 to \$500, 2 at \$500 to \$1,000, and 2 as above, \$1,000. In comparison with other forms of agriculture the income is not sufficient for an independent business unless large numbers of hens are kept. It was also somewhat difficult to estimate returns and profits, because of the variation in the egg supply and the price received per dozen. Returns were reported to range from 86 cents to \$10.67 per hen, 6 out of 16 claiming receipts from \$2 to \$5, and 6, \$6 to \$7 per hen. Profits were estimated as from \$1 to \$1.50 per hen by 11 of the 25 reporting, and as \$2 to \$2.50 by 6 who kept fancy breeds. One man reported a profit of \$6 per hen. Table 5 is given, showing the relation of capital, expense, and returns to the size of the plant in those cases where complete estimates have been secured.

OUTLOOK IN THE BUSINESS.

The outlook in poultry raising on a large commercial basis is excellent. The work demands intelligence and experience, as well as careful attention to details. A failure in any one of these essentials means, as one man put it, "many dead hens, but never any sick hens." Difficulties must be detected as soon as they arise in order to prevent serious disaster. By far the wisest plan for both men and women is to begin in a small way, and enlarge gradually when one has learned how to meet emergencies. It must be admitted that there are many failures in the business. The chief causes for these are (1) the lack of sufficient experience and constant attention and (2) the lack of a sufficient reserve

fund. Many people have met with difficulties by enlarging the business too rapidly. They find the difference between conditions of the small plant and the large so great that they are unable to meet the demands of the large plant. Too many people become enthusiastic and use all of their available capital before the plant becomes well established, so that they are unable to endure any difficulties or losses. No one should attempt poultry raising without at least a reserve capital of from \$500 to \$1,000 after the necessary equipment is secured. It is undoubtedly true that in proportion the small plant brings much better returns than the larger plant.

OPPORTUNITY FOR WOMEN.

It has seemed hardly necessary in this study to distinguish between the opportunity for men and women. Among the numbers interviewed, women were equally successful with men in the smaller plants. At present few women have been able to develop plants as large as have men, though they have been most successful in all branches of the work. Women usually possess the characteristics necessary and show an especial fondness for and interest in the work. The possibility of a small beginning, also, makes poultry, above all lines of industry, one which appeals to many women. For the woman who owns some land the best opportunity lies in developing a small poultry plant of from 200 to 300 hens. She may combine this with the growing of small fruits and vegetables for a local trade, or she may specialize in raising fancy breeds of poultry or broilers for the early trade. With any combination she may hope to succeed, provided she has a good market and is willing to allow the plant to develop naturally, while her own experience increases before attempting a large investment.

Here again appears the desirability of discovering a method by which the girl may secure training and especially experience or knack, and again one is forced to conclude that the girl on the farm or in the country should secure training through the school in conjunction with the farm or the home. The same difficulties arise and seem to require the same treatment as has been dis-

cussed under flower gardening and greenhouse production. To begin with, small investment or a small plant is necessary unless training and experience have preceded. Entrance to the business is therefore prohibitive for the woman who must depend on the income, unless she can combine the raising of poultry with other forms of country productivity, or unless she has had training and experience in girlhood. As an avocation or as supplementary to assured income, it is even more than floriculture a desirable venture for the woman adapted to its needs and requirements.

BEE KEEPING

INTRODUCTION.

As early as 1638 it is reported that bees were imported from England by the Massachusetts colony.¹ As the colonies increased in number and in size and as the westward movement of civilization began, bee culture spread throughout the entire country, and to-day it commands attention as an industry which adds materially to the income of many people and saves for use a substance which would otherwise be lost. Because bee keeping offers a line of work to many people rather than because it is a field with possibilities of extensive development by a few large establishments, and in order to discover its characteristics and the opportunities in it for women as a definite business enterprise this study has been made.

According to the census of 1900, from the 5,739,657 farms reported, bees were kept on 707,261 farms, making the number of colonies 4,109,629, with an average of something over 5 colonies to a farm.² The commercial value of these bees amounted to \$10,186,573, and the honey and wax produced were valued at \$6,664,904, with an average of about \$9.42 per farm. Dr. E. F. Phillips, of the United States Department of Agriculture, gives the five states producing the greatest amount of honey in 1899,

¹ Gates, Burton N., *Bee-Keeping in Massachusetts*, Bulletin 75, United States Department of Agriculture, Bureau of Entomology.

² See United States Department of Agriculture, Bureau of Entomology, Bulletin 75, Part VI., *Status of Agriculture in United States*, by E. F. Phillips, Ph.D.

as follows: Texas, producing 4,780,204 pounds; California, 3,667,-738 pounds; New York, 3,422,497 pounds; Missouri, 3,018,929 pounds; and Illinois, 2,961,080 pounds. In Massachusetts, to quote again from Dr. Gates, who has made a study of the industry in this state, there are few extensive bee keepers, but at least 2,100 who derive some income from bees. The crop for 1906, as he estimates it from answers received from about one-half of these bee keepers, was 145,257 pounds of honey, or approximately 73 tons. Dr. Gates further estimates the approximate number of colonies for which Massachusetts could supply abundant forage as 40,000 to 50,000, as compared with the 8,350 which he finds in the fall of 1906. Allowing an average of 35 pounds of honey for each colony, he concludes that the state could well produce 1,400,000 pounds, or 700 tons, as contrasted with the present supply of 73 tons.

These figures are valuable as showing the importance of the industry in the United States, and suggest that the honey product may be increased in this section of the country. A general statement of the outlook for bee keeping is difficult, since the production of honey depends largely upon climatic conditions attending the growth of nectar-producing flowers, as well as upon the character of the seasons. Furthermore, in every instance the bee keeper has to study the particular locality where he lives with a view to finding out the amount of forage near at hand and whether the neighborhood is already over-supplied with bees. It is claimed that bees will travel 5 to 7 miles for nectar, but many practical bee keepers feel sure that the bulk of the surplus honey produced comes from nectar secured within a radius of one mile.

GENERAL CONDITIONS OF THE BUSINESS.

With the purpose of securing some definite knowledge which might be of help for women interested in the industry, 47 practical bee keepers were interviewed regarding the size of their plants, the experience and training which they had received, and their purpose in keeping bees. In addition, questions of expenses, capital, and returns were asked in order that the out-

look for the future of the business might be tested. It has been impossible in some instances to secure accurate answers to all questions, but the number failing to respond will always be seen by reference to the tables.

Bee keeping is one phase of agriculture which does not demand a specified amount of land, provided the bee keeper live in a neighborhood where many nectar-producing flowers are grown. Also the profit is proportionately great for a small number of colonies, and training seems unessential in this phase of agriculture. Of the 47 cases studied, 21 had no land or very little, while many had under 25 acres. The rest had land ranging from 50 to 500 acres, but for the most part used it for other purposes than bee keeping. As will be seen by reference to the tables, the majority had under 25 colonies each, 16 having under 10 hives, and only 8 above 50 colonies, 4 of whom had very large plants ranging from 150 to 200 and from 500 to 900 colonies of bees.

NUMBER OF COLONIES OWNED BY BEE KEEPERS INTERVIEWED.

10	1 to 5 colonies	1	41 to 50 colonies
6	6 to 10 colonies	2	51 to 75 colonies
7	11 to 15 colonies	2	76 to 85 colonies
4	16 to 20 colonies	3	170 to 190 colonies
6	21 to 25 colonies	1	500 to 900 colonies
2	26 to 30 colonies	1	Not reporting
2	31 to 40 colonies		

Most of those keeping bees had little or no training for the work, 2 had taken short courses at the agricultural schools, 2 had studied with expert apiarists, and 14 had gained their training by reading and experimenting with bees.

Many men and women interested in bee keeping began more for the pleasure of the work and its fascination than for actual profit, though often they hoped to combine the two. Four men began to keep bees for the sake of the effect of the bees upon the growing of fruit, which was their dominant interest. Three men took up the work for the purpose of scientific research. Closely related to the purpose in keeping bees is the character of the product. There are three possibilities for the bee-keeper. He may keep bees for the honey product alone, which is done in 33 out

of 45 cases reporting. If, however, he aims to secure the greatest profit from his bees, he may by proper care and guidance reduce the secretion of honey to a minimum, while the bees spend their energies in building up new colonies. Five apiarists interviewed specialized on bees, while 6 raised both honey and bees. He may, if he thoroughly understands bees, raise queens for sale at high prices, as was done by one man interviewed. The last two methods offer a better financial return than do the others, provided a market is available. The honey market is most easily developed, but a definite trade has to be worked out. Market gardeners use many colonies of bees in their greenhouses, where they are specially needed in order to fertilize such plants as cucumbers; but the bees live only a short time, owing to the moisture and heat, so that large numbers are needed on extensive plants.

The majority of the 47 men interviewed have kept bees under 20 years; 27, 10 years and under; 35, 20 years and under; 11, 5 years and under; and only 7 gave their experience as of many years' duration. The work is not heavy, and most men require assistance only at special times during the summer, when the bees need constant attention to prevent swarming. Twenty-five of the men who keep bees said they employ no helpers, and 17 said they employ help only as needed. This eliminates one of the very heavy items of expense in most agricultural pursuits, and removes the difficult labor problem which confronts the farmer in other lines.

Expenses in bee keeping are small, as seen from a study of Table 6 on page 59.

Seventeen of the 30 bee keepers reporting expenses estimated the total cost of maintaining 1 hive as between 50 cents and \$1.50. The expenses of 7 ranged from \$6.25 to \$25, but these men probably included unusual expenses for food or equipment. Many bee keepers who make most of their own hives and frames reduce expenses to a minimum; thus two apiarists reported 25 cents per hive, 13 by their failure to give an estimate implied that the expense was negligible, and 4 stated the expense to be very small.

Not only in the matter of general expenses is bee keeping a unique industry, but in the amount of capital necessary to start a plant. Ordinarily, the inexperienced bee keeper begins with

2 or 3 colonies of bees, and oftentimes only 1 colony, and enlarges his plant as necessary. For this reason it is significant to notice the capital at the start and the increase in the amount invested at the time of the interviews. Of those men giving figures, 19 invested at first \$10 and under, and 32, \$25 and under, while only 2 had invested over \$100. When interviewed, only 6 had \$50 and under in the plant, 9 had from \$50 to \$100, and 13 also from \$100 to \$300. Five had over \$1,000, 1 man having \$10,000. From this it will be seen that in most cases the returns have been very good in proportion to the capital invested. Thirty-eight bee keepers reported gross returns. In 9 cases these returns ranged from 40 per cent. to 75 per cent. of the present capital invested. The proportion of returns to capital in 13 cases ranged from 80 to 150 per cent., and in 5 cases from 150 per cent. to 200 per cent. The profits were reported by 14 bee keepers to be from 75 to 100 per cent. of the gross returns, and by 7 to be 25 to 75 per cent. of the returns.

OUTLOOK IN THE BUSINESS.

While many men admit a good profit, 23 said the outlook as a business proposition was poor in this locality. The reasons given are mainly the lack of sufficient forage. First, the seasons vary so with excesses of moisture and dryness that the nectar is most variable. Second, at present the market for honey seems to be undeveloped, and in the best years there is difficulty in disposing of the honey surplus. Third, bee keeping requires a peculiar adaptability and acuteness which makes it impossible for all people to succeed. Many men start into the business, but comparatively few continue after 10 years. They are not able to control the conditions of the bees, to keep them in good health, and to avoid disasters from which bees are likely to suffer unless closely watched. Thus, while some may seem to succeed, many become discouraged and give up the business.

As an avocation, however, 17 men spoke very strongly in favor of the industry. It is a line of work which demands little capital. The bees soon pay for themselves and usually for the equipment necessary each year. There is very little expense involved and

TABLE 6. SHOWING THE INVESTMENTS, EXPENSES, RETURNS, PROFITS, AND OTHER DATA REPORTED BY 47 BEE KEEPERS INTERVIEWED.

(Data are given as suggestive only. Discrepancies often appear in totals due to variation in returns dependent on seasons and to incompleteness of accounts.)

Case Number	Number of Acres at Present	Number of Colonies	Number of Years in Business	Initial Capital	Present Capital	Annual Expenses Exclusive of Interest	Annual Returns	Annual Profits ¹
1	None	1	1	\$15 to \$16	—	Little	None	—
2	Little	2	1	\$13 to \$14	\$21	—	\$25	\$25
3	—	50	15 to 20	—	—	Little	—	—
4	—	9	7 to 8	\$25 to \$30	—	\$4 to \$5	Meets expenses \$1,000	Honey for use
5	Less than 1	Many	—	—	—	—	—	—
6	2	15 to 16	15 to 20	\$15 to \$20	\$125 to \$150	—	\$125	—
7	Little	5 to 6	5	\$250	—	\$5 to \$6	\$300 to \$400	\$300
8	25	22	3 to 4	\$10	\$150	Little	—	\$70
9	—	85	11	\$60	\$1,000	—	\$700 to \$1,000	\$280 to \$400
10	—	75	41	\$20	\$1,500	\$100	\$500 to \$700	\$375 to \$525
11	—	25	41	\$5	\$300	\$50	\$125	\$65 to \$70
12	—	4 to 5	8	\$27 to \$28	—	\$2 to \$3	\$25	—
13	Little	30	5	\$125 to \$150	—	Little	\$60 to \$80	—
14	None	78	30	\$10	\$500	\$300	\$396	—
15	190	40 to 60	15	\$100	\$300 to \$350	\$250	\$500 to \$600	75 to 95 per cent.
16	—	8	2	\$50	—	—	\$20	—
17	100	2	2	\$25	—	—	\$50 to \$40	—
18	300	35	6	\$14	\$500 to \$600	\$50	\$875	80 per cent.
19	1 1/4	190	40	Little	\$1,500	\$250	\$1,200	\$1,000
20	4	25	5 to 6	\$10	\$150	\$20	\$140	—
21	1/2	10	20	—	\$75	—	\$100	None
22	1	170	26	\$1	\$300	\$150	\$400 to \$500	\$300
23	1/2	190	28	Little	\$1,500	\$185	\$1,500	\$1,000
24	Little	13	8	\$15	\$150	\$15	\$75	\$60
25	200	24	10	\$20	\$250	—	\$100	90 per cent.
26	75	10 to 20	10	\$10	\$50	\$8 to \$10	\$200	Good
27	3	10 to 20	6	\$10	\$175	\$100	\$350	All
28	8 to 10	20	30	Little	\$100	\$5	\$200	—
29	40	14	10	\$8	\$100	\$45	\$140	—
30	80	16	7	\$9.50	\$100	\$10 to \$15	Gives away	All
31	1/2	14	7	\$6.50	\$80	\$10 to \$15	\$140	80 per cent.
32	2 1/2	13	12	\$7	\$150	—	\$60	—
33	3	20	8	\$30	\$300	—	\$140 to \$400	\$105 to \$300
34	60	20	35	\$20	\$200	—	\$140	—
35	150	25 to 40	15	Little	\$200 to \$300	—	\$150	Nearly all
36	—	6	5 to 6	\$7	\$40 to \$50	Varies	Uncertain	—
37	65	4	4	\$8.50	\$90	\$15	\$25	\$4 per colony
38	2 1/2	5	7	\$15	\$60	\$10	\$65	\$50
39	150	28	20	\$10	\$350	—	\$450	\$300
40	Little	12	3	\$18	\$60	—	\$120	\$102
41	2	11	8	\$9	\$50 to \$70	\$16	\$25 to \$50	\$10 to \$15
42	20	4	8	\$10	\$50	\$25	—	—
43	25	24	Many	\$5	\$100	—	—	One-half of returns
44	—	500 to 900	Many	—	\$10,000	\$500	—	Loss or gain to \$9,000
45	400 to 500	63	10	\$10 to \$15	\$600 to \$700	—	\$475 to \$950	\$375 to \$750
46	6 1/2	2	30	\$5	\$50	—	\$20	\$20
47	2	3	8	\$7 to \$8	\$18	\$2 to \$3	\$22 to \$30	\$15 to \$25

¹The sum or per cent. on investment reported often fails to include the amount of honey used for home consumption.

almost no real labor, save that care has to be taken at the swarming season. The returns are almost entirely profit. Besides the financial gain, bees are invaluable upon the fruit farm. Experiments have been tried of covering branches or parts of trees in order to keep the bees away and to discover their value in fertilizing the blooms. In every case it has been discovered that the fruit yield is very much decreased on those branches from which the bees have been excluded. The same thing is true for the farmer whose interest lies in raising small fruits, like strawberries, blackberries, and currants. Bees thus become a necessary adjunct to the equipment of the farm. For those who are interested in the study of nature and its works, bees are a never-ending source of delight. Many bee keepers have arranged observation hives where they study the daily life of the bees, and try to discover the principles which govern the important events of their lives.

OPPORTUNITY FOR WOMEN.

As a vocation, there is little field for women, as for men, to carry on bee keeping on a scale sufficiently large to make it a profitable business. But as an avocation, or in connection with other forms of rural production, success depends upon qualities which make a woman pre-eminently fitted to succeed. Acuteness of observation and attention to details are often united in women with love of animals and fondness for the occupation. In those cases, bee keeping offers an opportunity for light work and good returns. This is particularly true in small apiaries of from 5 to 15 colonies, which give profits of about 100 per cent. Above this number, capital is necessarily tied up in unused supplies which reduce the profits very considerably. Small apiaries also may be more easily managed in one locality, and the problem of sufficient forage becomes less serious. Women may very wisely combine with this the growing of small fruits and some orcharding, or they may carry on a poultry plant with perhaps 10 colonies of bees. Other combinations, such as poultry, bees, and fruit, or bees, fruit, and vegetables, are quite possible, and offer opportunities of success for the woman interested in life on the farm.

DAIRY FARMING

GENERAL CONDITIONS OF THE BUSINESS.

The question of securing pure milk has come into such prominence recently that it is essential to see what opportunity dairy farming offers to men and women as a business undertaking under present conditions of milk standards and prices. In this study 27 dairymen have been interviewed relative to the amount of capital invested, the general expenses of the dairy, the returns, and the profits of the business. The answers given are in no sense complete, but serve to point out the general conditions under which the dairy farmer labors.

Of the dairymen interviewed it is perhaps significant that a much larger number were born and brought up on the farm than in any other line of agriculture studied. Twenty-four of the 27 referred to were born and brought up on the farm, and only 3 stated that they had taken up the work in later years. Three men had been definitely engaged in this business under 10 years, 10 from 10 to 20 years, 8 from 20 to 30 years, and 3 from 30 to 50 years. Few of these men had any technical training. Two had attended agricultural colleges, 1 a normal school, and 1 a scientific school, but the majority had followed more or less closely the methods of their fathers in managing the dairy. Twenty-four sold their milk directly to the city contractor, delivering it at the nearest station. Five had a local trade in neighboring suburbs, where they delivered milk from their own teams.

Statistical data concerning the cost and the profits in dairying are so far from complete that it is difficult to find any unit on which conclusions may be based. As the profits are not given in most cases, the figures in Table 7 are here presented to show the range of expenditure and income, and with the hope that they may be a slight contribution to this extremely vexed but most vital question. The general conclusion must be that a small capital will not yield adequate returns. Either dairying must become altogether commercialized, or the price of milk must be increased to meet the new requirements, or the business must be considered a supplement to other types of agriculture.

There seems to be a great difference in the size of dairy farms, varying from 25 to 2,000 acres, though, of the cases studied, 7, the largest number, had from 70 to 110 acres, while 6 had 130 to 200 acres, 5 had 200 to 400 acres, and only 2 had from 25 to 40 acres. Nine men of those reporting kept dairies of 7 to 15 cows, and 12 of 20 to 50 cows, while only 3 had several hundred cattle. On most of these farms other animals were kept besides cattle, and, in considering the general expense of feed, these were included in the estimates given.

The amount of help required on a dairy farm varies with the number of cattle. Five men had no assistance outside that of the members of the family, 9 hired 1 man by the year, and 4 hired a man as needed. Six others employed from 3 or 4 men to 40 or 50 on the large farms. The wage paid was \$20 a month in 7 cases, \$30 in 8 cases, and \$40 a month in 5 cases. The men engaged are mostly Americans, though foreigners of all nationalities have been employed. In most foreign countries it is the women who have charge of the dairies, so that it has been found difficult to secure competent foreign men for this work. The loss from poor milking and care of the cattle has been so great in some cases that no foreigners are hired. On another farm the experiment is being tried of using Italian women to do the work, as in their own country. How far this may prove to be a solution of the problem cannot be stated at present, as the experiment is only started, but it seems to offer a possibility of relief for the dairy farmer.

Eleven of the 15 dairymen reporting the number of laborers and number of head of stock employed 1 laborer for 8 to 20 head of stock, and 4 employed 1 for 30 to 40 head. The cost of labor per head of stock was between \$4 and \$8 for 7 of the 23 giving this information, and between \$9 and \$14 for 6 dairymen. Five had a labor cost of \$15 to \$25 per head, and 5 from \$30 to \$60. In this industry general expenses are high in proportion to the expense for labor, 4 dairymen reporting them as from \$10 to \$25 per head of stock, 6 as from \$25 to \$50, and 8 as from \$50 to \$150 per head.

As has already been suggested, the expenses of maintaining a dairy are heavy. These are shown in detail, so far as obtained, in Table 7. The chief items of expense are those of labor,

feed for the cattle, and the expense of keeping up the herd. The cost of labor in medium-sized dairies is under \$500, though in the large dairies it amounts to as high as \$25,000. The general feed for the cattle is raised on most farms. Three men stated they raised all ensilage, 4 raised all feed except the grain, 3 raised oats, 8 raised corn and fodder, and 8 raised mainly hay. But the heavy expense comes in buying grain. This amounts in 16 cases to less than \$800, and in others given it is reckoned at several thousand dollars. Because of the necessity for careful inspection of the cattle, the matter of keeping up the herd becomes important. Many farmers raise the cattle on their farms, but in every case, though difficult to estimate, the expense is considered large.

Many of the dairymen who were interviewed have inherited the home farms, so were unable to state the amount of capital invested when they first started. Eleven, however, gave the estimate as between \$1,500 and \$5,000, and 2 over \$10,000. Every one of these men admitted that his farm had increased much in value since it had been in his possession, and of those who gave figures, 3 valued their farms at \$2,500 to \$5,000, 11 at \$5,000 to \$8,000, 1 at \$8,000, and 2 at sums ranging from \$16,000 to \$70,000.

As has already been stated, most men sold their milk directly to large city contractors. The milk is usually delivered at the local station in cans holding 8 or 9 quarts of milk. The prices paid for this milk vary from 30 to 40 cents per can, with an occasional drop in summer to 28 cents. The average number of cans which these farmers supply each week is interesting, and is given below.

NUMBER CANS SOLD PER WEEK BY FARMERS VISITED.

9 cans	2
10 to 15 cans	2
25 to 45 cans	4
56 to 84 cans	6
100 to 125 cans	5
175 to 200 cans	2
300 to 350 cans	2
800 cans	1
Not reporting	8

Returns ranged from 15 per cent. to 132 per cent. of the capital invested at the time of the interview, but 4 reported them as between 15 per cent. and 20 per cent., and 4 as between 30 per cent. and 45 per cent. Of these returns a relatively small percentage was reported as profits. Three gave their profits as from 8 per cent.

TABLE 7, SHOWING THE INVESTMENTS, EXPENSES, PROFITS,
(Data are given as suggestive only. Discrepancies often appear in totals due

Case Number	Number of Acres in Farm	Number of Cattle	Number of Years in Business	Number of Laborers	Initial Capital	Present Capital	Total Annual Expenses
1	25	550	20	50 to 90	Little	\$90,000	\$60,000
2	100	422	19	40	\$63,000	—	\$35,000
3	110	30	20	—	Home stock	\$6,000 to \$7,000	\$1,300
4	70	27	10	—	\$2,100	\$4,500	\$1,000
5	242	40	18	—	\$200	\$15,000	—
6	171	20	26	—	\$4,000	\$7,000	\$2,000
7	400	58	20	3	\$4,000 ¹	\$10,000	\$3,000
8	800	100	12	2 to 4	\$8,000	\$24,000	\$2,000
9	48	32	10	1	\$4,500	\$5,000	\$1,400
10	137	50	26	2 to 3	Home farm	\$11,000	—
11	60	12	3	—	\$500	\$6,000	\$600
12	2,100	240	16	16	\$5,000	\$60,000 to \$70,000	\$12,000
13	175	50	4	1 to 10	\$15,000	Small increase	\$8,000
14	40	7	30	—	\$1,500	\$3,000	\$500
15	200	18	60	—	Inherited	\$5,000	—
16	294	32	—	1	\$6,000	\$8,000	—
17	300	40	15	1	\$300	\$10,000	\$4,400
18	192	34	13	—	—	\$9,000	\$1,800
19	45	5	35	—	\$5,000	\$6,000	—
20	100	20	20	1	\$4,000	\$6,000	\$1,500
21	80	11	50	1	Home farm	\$11,000	\$2,000
22	150	15	5	1	Home farm	\$5,000	—
23	90	12	15	1	\$5,000	\$7,800	\$1,000
24	75	15	25	—	—	\$7,000	—
25	200	21	40	—	\$4,000	\$9,000	\$1,000
26	45	10	20	—	\$5,000	\$6,000	\$500
27	180	10	16	1	\$150	\$3,500	\$300

¹ Took father's farm with mortgage of \$4,000.

to 16 per cent., and 4 as from 30 per cent. to 40 per cent. of their returns. Few dairymen were able to estimate the definite returns and profits as seen in Table 7. From the opinion expressed it seems quite probable that the profits were very small, and in some cases it was stated that the cattle just paid for them-

AND OTHER DATA REPORTED BY 27 DAIRYMEN.

(to variation in returns dependent on seasons and to incompleteness of accounts.)

ITEMIZED EXPENSES					Annual Returns	Annual Profits ^a
Labor	Grain	Other Feed	Keeping up the Herd	Other Expenses		
\$27,000 to \$28,000	\$20,000	\$6,000 to \$7,000	Heavy	\$1,000	\$118,625	—
\$25,000	—	—	\$7,000 to \$10,000	\$1,000	—	8 per cent.
\$400	\$600 to \$800	—	\$150	—	\$1,300	None
—	\$800	—	\$150	—	\$2,000	\$1,000
\$100 to \$200	—	—	\$150 to \$200	\$300 to \$400	\$2,500	\$1,000
\$150	\$600	—	—	\$800	\$3,000	\$1,000
\$1,350	\$1,600	—	—	—	\$3,000	\$500
\$1,000	\$600	—	—	—	\$3,500	and living 8 per cent.
\$800	\$500 to \$600	—	\$30	—	\$1,500	Manure
—	\$150	—	—	\$500 to \$600	—	\$1,000
—	\$500	\$100	—	—	\$1,000	—
\$5,000 to \$6,000	\$6,000 to \$7,000	—	—	—	—	\$15 per acre ^b
\$7,000	\$7,000	—	—	—	—	—
\$1,400 to \$1,800	\$1,500 to \$2,000	—	\$3,000 to \$4,000	—	—	—
\$85	\$225	\$150	—	\$50	—	—
—	—	—	—	—	—	—
\$300	—	—	\$150	—	—	—
\$400	\$1,000	—	\$3,000	—	—	—
\$150	\$600	\$100	—	\$600 to \$700	—	—
\$200	\$150	\$50	—	—	—	—
\$200 to \$300	\$400	\$100	\$500	\$250	—	\$700
\$525	\$350	\$1,000	\$25	\$125	—	Good wages
\$275	\$75	—	—	\$100	\$1,528.80	\$500
\$300	\$600	—	\$500	—	—	—
\$100	—	—	—	—	—	—
\$500	\$200	—	—	\$300	—	—
\$50	\$300	\$25	\$50	\$75	—	—
\$80	\$150	\$50	\$50	\$25	—	\$50 per cow

^a Profits reported often fail to include living.

^b This sum probably includes other income from farm.

selves, and that the only profit to the farmer was in the fertilizer.

OUTLOOK IN THE BUSINESS.

From the study of definite dairy farms it is evident that the outlook in dairy farming is not bright. The farmer faces the labor problem in its most serious aspect. He is unable to secure competent and reliable help, but is obliged to pay high wages for whatever help he can secure. He suffers from the poor work of his men in managing the farms, in careless and ignorant treatment of the cattle. In the past few years, expenses for all farm supplies have increased so that the farmer must pay almost double for grain for his cattle. The supply and quality of milk, too, depends as closely upon the feed of the cattle as upon the treatment which they receive, which makes it important that the feed be of the right kind. The high standards of milk which are demanded at the present time make necessary a further increase in the cost of production for the farmer. Besides the loss which he suffers when his milk is below standard, he is obliged frequently to lose cattle from his herd.

Although almost all dairy farmers are ready to admit that the outlook in this business is far from encouraging, yet they continue in the business, just making a living from the farm, but never making enough profit to give them a fresh start. This attitude is doubtless due to two reasons. First, as has been stated, most of these men were born and brought up on the farm, and are general farmers, recognizing that cattle are essential to the fertility of the farm. Second, many of these men do not dare to attempt a new line of work, though they recognize that dairying is not profitable.

OPPORTUNITY FOR WOMEN.

For a woman who is considering dairy farming as a business there are the same difficulties as for men. The outlook under present conditions is not hopeful unless she be a woman of means who is interested in the solution of the milk problem. Some

women have been able to make a success of dairying by securing a high grade of milk, which they sell to a select retail trade at high prices. The greatest possibility of success in dairy farming at present is a small dairy combined with other lines of agriculture, preferably poultry or small fruits.

CONCLUSION

Any general statements as to the outlook for agriculture in the State of Massachusetts are of dubious value, because of the present changes in farming to meet the evolution in industrial and social conditions in New England. The increase in specialized farming and in intensified farming has brought with it various new conditions in each form of agriculture. The conclusions set forth in each section throughout this discussion must therefore be carefully noted. But the relation of woman to agriculture as an occupation should perhaps be summarized, although it is necessary in every instance to remember that the general economic conditions must affect her business equally with that of men, and her opportunity will reach its limits in either extreme, according to the soil, the seasons, the supply of the market, and her native ability.

Three questions arise: What has this discussion shown of the desirability of the various phases of agriculture for women? What is the outlook from the point of view of investment? What is the need and opportunity for training? The number of women actually employed in agriculture, the satisfaction and happiness of women engaged in one or another of the country industries, the general trend of interest away from urban to rural life, the increasing problem of investment and care of property for women, as well as of occupation,—all of these, together with the quasi-domestic character of rural life, seem to indicate that women are eager for, as well as fitted by temperament and ability for, just such an outlet for their activity.

The object of the investment must decide the type of investment. The woman with property to develop and the woman with money to invest form two groups for consideration. The

former may find far greater returns from development of that property than from its sale or rental. With enthusiasm and natural ability she may work out a profitable investment by beginning in a small way in one or another of the lines which have been presented in the preceding discussion,—in orcharding, from which returns are slow, in floriculture, in nursery culture, in poultry raising, and perhaps in market gardening or in dairying.

The woman with available capital and an intense love for rural occupations may similarly invest. To her larger choice will be possible, and if she is confident of her business ability, she may invest enough to carry on a large business, depending on employment of experts to supply her lack of knowledge and experience. The crucial need in either case is thorough understanding of the occupation. It is the lack of opportunity for agricultural education which enforces the conclusion that for a sole source of support, even for a woman with property or capital, the industry is one for careful and cautious approach. On the other hand, there seems sufficient proof that for partial support or for an avocation the outlook is distinctly encouraging. Always, however, it must be remembered that, more than in ordinary occupations, fitness, taste, love of the enterprise, must be present, for the possibility of loss due to ignorance or neglect is tremendous.

The grave problem, then, for the woman with property or financial resources is how to secure training and experience. The agricultural colleges and schools are now supplying the former. The latter is as unattainable as ever. Women cannot become laborers or apprentices in farm work. The only apprenticeship so far suggested is that to one's self,—a small beginning and growth with experience.

There is, however, one hope for the future,—the education of the girl on the farm or in rural regions through the school in co-operation with the home, where she may obtain her training in the school and her experience in the home. The young girl who has been taught the principles of horticulture and floriculture, poultry, and bee raising in the school, might be able to apply this knowledge on the home place, beginning by setting out a few young trees or by reclaiming old trees, by making a small outside bed

or a small hotbed, by raising a few hens, or by keeping a colony of bees, keeping account of the expense, the income, and the profit or loss. She might thus gain experience as well as instruction. Such seems to be an outlook for the girl, if she continue on the farm or if she return to the farm in later years. It seems conclusive that the girl cannot become a wage-earner in agricultural pursuits; that, to succeed at all, she must begin with at least a small property or capital for investment. Given this condition, the woman who has natural taste for country life and activity may find opportunity for satisfying self-expression.

CHAPTER II

OPPORTUNITIES FOR WOMEN IN SOCIAL SERVICE

(BASED ON A SURVEY OF SOCIAL WORK IN NEW ENGLAND CITIES AND TOWNS)

COMMITTEE ON ECONOMIC EFFICIENCY OF COLLEGE WOMEN

BOSTON BRANCH, ASSOCIATION OF COLLEGIATE ALUMNAE, 1911-1912

Miss SUSAN M. KINGSBURY, <i>Chairman</i>	Miss SARAH McLAUGHLIN
Miss HELEN BIGELOW	Miss RUTH MULLIGAN
Miss MARY COES ¹	Miss MARION NICHOLS
Miss SUSAN CRAMPTON	Miss MARGARET RANKIN
Miss EMILY A. DANIELL	Miss ETHEL M. REMELE
Miss HELEN EMERSON	Miss ANNA RUSSELL
Miss MIRIAM GAGE	Miss ELIZABETH SCHNEIDER
Miss CAROLINE HAM	Miss MARJORIE SMITH
Miss HELEN HORNBLOWER	Mrs. KENNETH USHER
Miss FLORENCE JACKSON	Miss MARGARET VICKERY
Miss GRACE P. LOCKE	Miss EVELYN WALKER
Miss CAROLINE WRIGHT	

REPORT PREPARED BY ABIGAIL STEERE.

¹Deceased.

OPPORTUNITIES FOR WOMEN IN SOCIAL SERVICE

FOREWORD

VIDA D. SCUDDER

PROFESSOR OF ENGLISH LITERATURE, WELLESLEY COLLEGE

The candidate for social work should bear three things in mind:

First, her future profession differs from others in that it is provisional in character, springing not from the permanent necessities of civilization, but from special conditions which she must ardently lament and may seriously hope to see altered. It is not inherent in human relations that people should be set to investigating one another, nor that large sections of the population should be so destitute as to require official friendliness. Many forms of ministration considered in the following report are created by social maladjustment and inconceivable in a wholesome society. In proportion as our social diseases are healed, our need for social service will be over. The professionalizing of such service is one of the ironic paradoxes of these curious times. It is a tragic commentary on the age. The imaginative social worker will then employ her trained capacity and her unique opportunities not only to treat symptoms, but to discover causes. She will perform her task with all the zeal and power that are in her, filled all the time with sadness that such a task should be needed, and with hope for the day when the great fellowship to which she belongs, the Servants of the People, shall have labored to such effect that they have rendered themselves unnecessary. Such hope, such sadness, alone, can preserve her from that complacent professional

attitude toward those she serves which is an invading danger of philanthropy and destroys all finer usefulness.

Second, the candidate must examine herself as to motive. If from necessity or instinct her motive is economic, it is doubtful whether she should choose social work as an occupation. For one thing, salaries, as the report shows, are often meagre; and it is not wholly niggardliness that keeps them down, it is rather the sense that nobody is wanted in this kind of work who desires profit from it. The public expects the social worker to enter on her task in the spirit of the missionary. Now the laborer is worthy of his hire, and the Lord told His disciples to accept a living from the communities to which they ministered. But we cannot imagine them demanding more than a living.

This is true to a degree of all forms of human labor. As Ruskin succinctly puts it, "Work first, you are God's servants: fee first, you are the fiend's." The joy in vocation should always be the chief impelling force. But we all know in how many cases, when there are others dependent or provision must be made for old age, salary must be emphasized, however reluctantly. And in many instances, as in business positions or the lower ranges of art, letters, or teaching, fine feeling is not shocked by such emphasis. But the situation differs in social work. Here, where the worker has to minister directly or indirectly to acute misery and distress, mere spiritual good taste will make her shrink from receiving higher pay than she needs to maintain efficiency. Imagine the followers of Vincent de Paul enthusiastically offering to nurse the sick—for a generous stipend! The modern world needs more than ever the spirit of Saint Vincent. This spirit must be trained nowadays, but that is no reason why it should be commercialized.

It is noteworthy that the best-paid positions, administrative or investigative, call for least human contact. This is as it should be, for they require a higher degree of those marketable qualities of brain for which the community is ever ready to pay. But the humbler offices, which involve just loving people wisely, are, after all, nearer the chosen activities of the saviors of the race. Christ did not investigate, He healed. We grumble because the more personal and intimate ranges of social work are paid so little, but

the truth is they never will be paid in earthly coin; and, if one chooses such pursuits, one must expect this and not be restless. "My brother," says Carlyle, "the true man has to give his life away." Nor does a "low-paid worker" necessarily render "a low quality of service." The higher the type of work, the slighter the relation of pay to it. In art the best is underpaid or not paid at all. The popular novelist rolls up royalties: Matthew Arnold and Browning received scantiest reward. Just in so far as social service is an art and not a trade will the rewards fail to measure either the quality or the dignity of the work accomplished.

Nevertheless,—and here is the third point,—the worker ought to receive and demand enough to insure full efficiency. It is all very well for social servants to sacrifice themselves,—as they frequently do,—but it is viciously wrong and extravagant for the community to allow them to do so; and for the sake of the community conscience they should agree as a body to keep the valuation of their services at a fair efficiency point. Such a point is perfectly possible to ascertain with fair accuracy, and, when we have done this, we shall see farther into this perplexing subject than we now do.

On the whole, the tendency of wages in this field would seem to be upward, and this is a good tendency simply because in the past they have often not been large enough to keep the worker efficient. Volunteers inaugurated social service, and their day is far from over. More people are needed than ever before who, having "received their wages in advance," can serve for pure love. But they now need to be supplemented by paid experts, released from other ties and uncertainties by binding business contracts; and such experts will naturally furnish much of the direction. The public should pay these experts well enough to insure the fullest possible development for them on their own lines.

To lament the professionalizing of social service is unprofitable. Let us rather study the opportunity it presents. We may see in it at will either the commercializing of a sacred impulse or the extension of that impulse to the corporate life till it governs those who can send others, as well as those who cannot go unless they be sent. But, if we are to take it in this high way, we must all keep

free of taint. Those who give the salaries must do so generously. Those who administer must cultivate imagination. From those who do the personal work all instinct of advantage must be purged. And all together, in united devotion to the dawning vision of justice, must look forward to the day when their labors shall have blotted this strange profession out of existence, and when no human being need longer be paid for the exercise of enlightened love.

The social worker will, we hope, some day be no longer an official type. Meantime she carries in her heart the ideal of a new age. Let her adopt her calling, then, in the spirit not of one choosing a trade, but of one entering a religious order.

OPPORTUNITIES FOR WOMEN IN SOCIAL SERVICE

(BASED ON A SURVEY OF SOCIAL WORK IN NEW ENGLAND CITIES
AND TOWNS)

1911-1918

INTRODUCTION.

"We have seen in the last ten years," says Miss Mary Richmond, "a wonderful development of specialists in the field of social service, all greatly enriching and diversifying treatment and increasing the possibilities of cure." This most remarkable growth in the field of social service from casual volunteer work to the present carefully specialized profession has necessitated a wide range in the demands made upon the social worker, has imposed great responsibility, and has resulted in equally large opportunities.

This new profession is one of singular interest to woman, for the conservation of human life has always fallen to her lot. She has always been the neighbor nurse and social worker; and now what should be more fitting than that she should become "the trained and specialized good neighbor," as expressed by an eminent social worker? As might be expected, the field at first was filled with an eager, enthusiastic crowd of women, the majority of whom were untrained, but had leisure. From this first chaotic group has gradually emerged the type of trained women and men, who in time, if we may believe the general trend, will be found in control of all philanthropy.

Social work, like teaching, must ever be a profession of service, whatever the special field of approach. But, as in teaching, modern conditions are requiring an increasing breadth and depth of general education as well as special preparation to be able to render that service efficiently. It is not a calling, therefore, to be entered upon lightly, and the woman who wishes to become a

social worker should consider devoutly her qualifications and plan carefully her course of training. The lack of detailed information needed for guidance has led to the following presentation of facts concerning the social work of a group of communities, in the hope that by this concrete outline the entire subject may be illuminated. Consideration of the requirements for success in the chosen field should not detract from idealization of the profession, neither should attention to financial remuneration interfere with the spirit of service. As long as a considerable proportion of social workers are no longer volunteers, and women face the economic struggle, attention to stipend is imperative. Else the unfortunate situation must develop which has appeared in teaching, whereby the low-paid worker comes to render a low-grade service, and results are proportionately unsatisfactory. It is with the desire of avoiding this danger that the question of salary has been set forth as fully as data will allow, and it is to be hoped that no thought of commercializing the profession will arise. Any one contemplating social work should accompany a study of the facts here presented by consultation with a competent adviser, one who by experience and training knows the qualities of soul and mind and body requisite for rendering efficient service.

The survey aims not so much to portray existing conditions in social work and the status of the worker as it attempts to reveal the responsibilities and opportunities for the trained woman at the present time and more especially in the future. To accomplish this end, it has been necessary to ascertain the different types of positions which exist, the age and religion of the women holding them, the requirements for each type of work and the training desired. It has also been essential to learn the salaries paid and the outlook in each field. For example, in one city we have a woman attendance officer, who is practically a truant officer, the only one in the state, so far as we have been able to learn. It is not so important to know her exact salary, training, and experience, however valuable these facts may be, as it is to apprehend what the public is going to demand of attendance officers, whether this new type of position will be a permanent one and whether the demand will increase. The study should serve,

therefore, as an article of reference, and should be read in connection with discussions by experienced social workers which appeared in Part I of *Vocations for the Trained Woman*.

The study was made by the Committee on Economic Efficiency of College Women of the Boston Branch of the Association of Collegiate Alumnae, affiliated with the Appointment Bureau of the Women's Educational and Industrial Union of Boston. For the past two years, 1911 to 1913, it has co-operated with the Appointment Bureau in collecting data on the opportunities for trained women in fields of work other than academic teaching, devoting most of its time to social service. In this survey, by personal interviews, the members of the committee have secured information with regard to 800 women representing 18 different types of social workers and 49 different types of institutions or organizations.

The schedule, which is printed below, supplied the following information: the types of institutions conducting social work in each community; the number of employees, noting the number of women; the types of positions held by women and the number in each; the method of obtaining workers, where they were trained and where the training can be secured; the character of the duties and the salaries paid; the chances for advancement; and the requirements with respect to age and religion. In addition the questionnaire called for statements which should reveal the value of the trained *versus* the untrained worker and the opportunities for part-time and volunteer service.

**QUESTIONNAIRE USED IN THE STUDY OF OPPORTUNITIES FOR WOMEN
IN SOCIAL SERVICE.**

Institution.

Purpose.

Interview with.

Address of person interviewed.

Position.

Date.

Interviewer (with address and telephone number).

REPORT.

1. How many employees?
2. How many of these are women?

3. Types of positions and number of women holding each?
4. Where are employees obtained?
5. Is there any difficulty in obtaining employees?
6. How were they trained?
7. Where can the training be obtained?
8. Salaries of each woman worker?
9. Character of the work?
10. What opportunities are there for
 - a. The untrained college girl?
 - b. The trained woman?
11. What opportunities are there for advancement?
12. Qualities necessary for applicant?
 - a. Age?
 - b. Religion?
13. What opportunity for part-time work?
14. Opportunities for volunteer work?
15. Other data?

The investigation was conducted in seventeen cities and nine towns, representing communities differing widely in number of population and kind of business interests, whether manufacturing, mercantile, or residential. The attempt was made to discover the phase of social service which one may expect to find in various classes of cities, and the requirements and opportunities in each field under these different conditions. Thus social workers in Fall River and New Bedford were interviewed to learn the types of philanthropy carried on in cities given over almost entirely to the manufacture of cotton cloth. Lawrence and Lowell were visited as being representative cities with extensive mill industries and having a large foreign element in proportion to the total population. Worcester, Cambridge, Somerville, and Portland were included in the survey as cities having no one predominant industry, but with a number of important large and small manufacturing interests. Boston and Providence were visited as typical of greater cities having more diversified and better organized fields of social work. In addition a number of smaller cities and towns were studied, whose interests are chiefly mercantile and residential.¹

¹See Table 1.

TABLE 1. SHOWING THE CITIES AND TOWNS VISITED, WITH SIZE AND CHIEF INTERESTS OF EACH. BASED ON UNITED STATES CENSUS FOR 1910.

Name of City or Town	Population	Type of City	Chief Industrial Interests
CITIES			
Boston . . .	670,585	Mercantile	Boots and shoes, leather goods, slaughtering, meat packing
Providence . .	224,326	Manufacturing	Jewelry, cotton cloth
Worcester . .	145,986	Manufacturing	Women's clothing, foundry and machine products
Fall River . .	119,295	Manufacturing	Cotton cloth
Lowell . . .	106,294	Manufacturing	Cotton and woolen goods
Cambridge . .	104,839	Manufacturing	Printing and publishing, rubber shoes
New Bedford	96,652	Manufacturing	Cotton cloth
Lynn	89,336	Manufacturing	Boots and shoes
Lawrence . .	85,892	Manufacturing	Woolen and worsted goods
Somerville . .	77,236	Manufacturing	Women's clothing, jewelry
Portland . .	58,571	Mercantile	
Malden . . .	44,404	Residential	
Salem	43,697	Manufacturing	Boots and shoes, leather goods
Fitchburg . .	37,826	Manufacturing	Paper goods, cotton goods, machine products
Everett . . .	33,484	Residential	
Waltham . . .	27,834	Manufacturing	Clocks, watches, cotton goods
Medford . . .	23,150	Residential	
TOWNS			
Brookline . .	27,792	Residential	
Leominster . .	17,580	Manufacturing	Celluloid goods
Framingham . .	12,948	Manufacturing	Paper goods, boots and shoes
Watertown . .	12,875	Residential	Rubber boots and shoes, worsted goods
Greenfield . .	10,427	Residential	Machine-shop products
Natick . . .	9,866	Residential	Boots and shoes
Milton . . .	7,924	Residential	
Concord . . .	6,421	Residential	
Lexington . .	4,918	Residential	

The report is not a complete study of New England nor of a portion of it. But information was secured from every social agency which could be found in every city or town studied, and is, we believe, correct so far as secured. It should, therefore, present representative types and representative conditions, and allow of conclusions which would hold for a more extensive study.¹

¹This report does not include a study of the various kinds of social work carried on by the Roman Catholic Church, because such work is largely confined to the sisterhoods of the church, and for this reason is outside the purpose of this survey.

EXTENT OF SOCIAL SERVICE IN CITIES AND TOWNS VISITED.

In cities having over 100,000 in population, as Boston, Providence, Worcester, Fall River, Lowell, and Cambridge, we find an Associated or Organized Charities Agency, with the exception of Lowell, where conditions are unique, as will be pointed out later. All of these cities support District Nursing Associations, Day Nurseries, Young Women's Christian Associations, and playgrounds, except Fall River, but that city has a Women's Union, similar in character to the Christian Associations. Settlement houses are also found in these cities, the number varying with the size of the city and the size and number of the districts inhabited by people of foreign birth. Thus in Boston there are twenty-two settlement houses, whereas Fall River has no regular settlement, so far as could be learned, though various organizations there conduct different kinds of settlement work. Hospitals and homes for the aged and for children were found in all these cities.

In the cities under 100,000 in population, not including towns, as New Bedford, Lynn, Lawrence, Somerville, Portland, Malden, Salem, Fitchburg, Everett, Waltham, and Medford, the number of agencies is proportionately much less, as is also the number of social workers. Associated Charities organizations are found in seven of these cities, namely, New Bedford, Lynn, Somerville, Portland, Malden, Salem, and Fitchburg, and District or Visiting Nursing Associations have been established in New Bedford, Somerville, Portland, Waltham, and Medford, although all of the communities visited supported at least one district nurse. In addition, all of these cities have homes for the aged, and, in some instances, for the blind or deaf, and private societies to relieve poverty, while several provide industrial classes for boys and girls.

All of the towns included in this report support district nurses. Leominster has an Associated Charities organization. Brookline has a Day Nursery and a social worker, who is employed at the library, the only worker of her type discovered in this investigation. She interests the children in the library, organizes clubs, visits families, and reads stories to the children on Sundays.

Framingham maintains a Girls' Club and a playground in summer. Milton has an association which studies the social conditions of the community, and plans methods of betterment and is provided with an endowed playground and hospital. The social service in the other towns consists of homes for the aged and handicapped and small societies for the relief of the poor.

To provide the woman looking toward social work with suggestions as to opportunities in specific localities, we present the following more detailed report of the larger cities.

Boston. Boston is a city of many different manufacturing interests, with no one predominant unless it be the production of boots and shoes, including cut stock and findings. Of the 163,488 persons employed in the manufacturing industries, 49,121 are women. But Boston is also distinctly a commercial centre, bringing together large groups of people who are engaged in the exchange and transportation of products. Boston is likewise the port of entry for New England, and thus aggregates and holds the residuum of a great number of unskilled immigrant workers, who are gradually absorbed by the manufacturing towns surrounding it. These conditions have made necessary a vast amount of social work.

The sources of information used to learn the type and number of agencies doing social work in Boston in addition to personal inquiry were the annual *Report of the State Board of Charities* for 1911, the *Charities Directory*, 1907, and the *Handbook of Settlements*, edited by Robert A. Woods and Albert J. Kennedy.¹

The following classification of charitable organizations taken from the *Charities Directory*, 1907, served as a basis for making the survey:—

I. Agencies working with Needy Families in their Homes.

1. Special Relief for Special Classes.
2. General Relief for Special Classes.
3. General Relief for All Classes.
4. Day Nurseries and Kindergartens.

¹The *Report of the State Board of Charities* for 1911 and the *Charities Directory* for 1907 are the last publications issued by the respective boards.

II. Agencies working with Needy Children.

1. Placing-out Agencies.
2. Prevention of Cruelty.
3. Homes for Children.
4. Reformatory Agencies for Children.

III. Preventive and Reform Agencies.

1. Preventive Agencies.
2. Reformatory Agencies.

IV. Constructive Social Work.

1. Settlements.
2. Clubs, Classes, Libraries, etc.

Chief among these organizations according to number of branches and workers are the Associated Charities, the District Nursing Association, the Young Women's Christian Association, the various children's organizations, and the numerous settlements. The Associated Charities has 19 districts and 55 agents, the District Nursing Association 48 graduate nurses, and the Young Women's Christian Association 42 trained assistants. Fourteen organizations concerned only with caring for children, exclusive of nurseries, were found with 85 workers. In the 22 settlement houses 150 paid and volunteer women are employed. In addition to these four larger organizations employing, as noted, a total of 380, Boston boasts 34 school nurses, 31 nurses and assistants in 8 hospitals and dispensaries affording medical relief, 20 women in 7 day nurseries, and 94 teachers, employed by three societies especially interested in providing instruction in industries. To summarize by type of social agency, there are in Boston 55 women engaged in charitable relief, 113 in medical relief, 105 in children's societies and nurseries, 150 in settlements, and 136 in social and industrial education, a total of 559. Besides these, the majority of whom are paid, there are large numbers of volunteer workers.

Providence. Providence is pre-eminently a manufacturing city, given over largely to the production of jewelry and cotton and woolen goods. It has a total of 51,667 people engaged in

industry, of whom over 5,000 are women, mostly operatives in cotton and woolen mills. The survey in Providence is, we feel, less complete than in other cities. But, apparently, the number of workers is small in comparison with its population and its industrial character. However, practically all types of social service activities are represented, among which are the Society for Organizing Charity, which employs a general secretary and six assistants; the District Nursing Association, which has 34 nurses and a visiting dietitian; the Young Women's Christian Association with five specially trained workers; a Bureau of Social Research with three women investigators; a Consumer's League with a general secretary; two settlement-house workers; two homes for girls and two day nurseries; and several playgrounds, which employ about 48 women as compared with 22 men. There are also two probation officers, one of whom is a woman who works with the Juvenile Court, the rescue home and the maternity hospital.

Worcester. Worcester is a city of 145,986 people, with the manufacture of women's wear and of foundry and machine-shop products as its chief industries. The field of social service in Worcester is fast developing into a real profession. About 50 women and 6 men engaged in social work, not including the 63 playground directors, have formed the Monday Evening Club, which has helped to bring about better organization of social activities. The Associated Charities in Worcester employs four women, the District Nursing Association ten nurses, the Children's Friend Society three women who attend to the placing out of children and their supervision, and there is one school nurse. The Young Women's Christian Association has six workers, and eight of the churches have visitors who do social work among their congregations. There are thirteen matrons or housekeepers in the five "homes" and the two day nurseries. Under the Playground Association are 63 workers, most of whom are teachers in the industrial classes. The only woman attendance officer in the state holds her position in Worcester. She was appointed under the Civil Service and her duties are practically those of a truant officer, although she does social work among the families of the children whom she investigates.

Fall River. Of the 34,314 persons engaged in industry in Fall River, more than three-fourths, or 27,977, are in cotton mills. Consequently, the philanthropies of the city centre about the mills. The social service for which we have data are: the Associated Charities, which has a head worker; the District Nursing Association with its superintending nurse; the visitors of the five churches; the secretary of the Anti-Tuberculosis Society; the nine nurses of the Seaside Home which cares for sick children in the summer; the day nursery supported by the College Club; and the Girls' Club connected with the Women's Union. No settlement houses were found, although a great deal of work along this line might be done to advantage.¹

Lowell. Social service in the city of Lowell presents a unique situation. In the first place less than 20 per cent. of the population is Protestant, and this proportion is steadily growing smaller. The Roman Catholic organizations include a hospital, orphan asylums, parochial schools in each parish, and district visitors. Therefore, this study has been limited to the small portion of social work which exists outside the Roman Catholic Church. Philanthropic efforts are further restricted by the cosmopolitan character of the city. Each nationality lives apart to a greater extent than is probably the case in other cities, and maintains its own customs, institutions, and language. This makes it exceedingly difficult to approach the people as a whole. The city is bankrupt and, as there is not sufficient private wealth to conduct its present institutions, the majority of donors agree that the money contributed should be used for direct relief rather than for social investigation and developing new methods of social work.

So far as discovered, there are only seventeen women, exclusive of matrons holding paid posts in Lowell, as compared with sixty women social workers in the smaller city of Cambridge. The Young Women's Christian Association employs six trained women, who with nine district nurses comprise the staff of paid women workers in Lowell. The office of probation officer is held voluntarily by the agent of the Florence Crittenten Rescue Mission, where she has her home. The Federation of Churches has a

¹The beginnings of a settlement are just being made.

playground supervisor during the summer and a teacher of games during the winter.

Much of the social service in Lowell is rendered by volunteers. In this class come the visitors of the various churches, the workers of the Middlesex Women's Club and the College Club, and the large number of settlement class and club leaders under the Ministry-at-large.

Cambridge. Cambridge is fast growing into a manufacturing city with its boot and shoe factories, box factories, printing establishments, machine shops, and numerous other industries. As a result has come an influx of immigrants, so that now about two-thirds of the population are foreign-born. The city is endeavoring to meet the new conditions, however, and we find about sixty women engaged in social work, exclusive of volunteers.

The Associated Charities of Cambridge has three district secretaries and a visiting housekeeper besides the general secretary. The medical social service consists of twelve visiting nurses, two of whom are school nurses, and one paid worker in the social service department of the hospital. One organization with a general secretary and one assistant takes charge of all the distinctively children's work in the city. Starting as an institution for the care of destitute children it has now become a home for sick and convalescent children, with a placing-out agency for those who are destitute. The Young Women's Christian Association supports six general workers and six teachers in the industrial department. Four paid positions are found in the three settlements employing women, in addition to a playground director, a nurse, a nursery matron, and the teachers of industries and domestic science. The Park Department of the city employs about twenty women during July and August in the children's playgrounds. Two of the churches have salaried assistants, the stipend of one outranking that of any social worker in the city.

New Bedford. In New Bedford, a city of 96,652 population, the social work centres around the north and south districts where the cotton mills are located. The more important social organizations are (1) the Charities Organization, which employs a general secretary, an assistant secretary, and a visiting, instructing

housekeeper; (2) the Instructive Nursing Association with seven district nurses; (3) the Anti-Tuberculosis Association with seven district nurses; (4) the Children's Aid Society with three workers; and (5) the Young Women's Christian Association, which has recently been established and has five women in its employ. The Union for Good Works supports a relief investigator, a women's exchange department, and a boys' club. The Denison Memorial and the North End Guild resemble settlement houses, as they have classes and clubs for young people. In addition there are two day nurseries in the north and south ends of the city.

Lawrence. Social conditions make Lawrence different from the other communities studied for this report. The mill owners have recently pledged themselves to pay annually the sum of \$30,000 to be used in helping social service organizations of the city. This Welfare Fund is managed by a committee of three, which employs a secretary to investigate the agencies of the city preparatory to deciding which ones shall be assisted. Only organizations already established in social work are considered.

Lawrence has eight district nurses, four Young Women's Christian Association assistants, six supervised playgrounds with several teachers each, four church visitors, a trained nurse who conducts the Sanitary Milk Station, and the City Mission which has three workers. The Women's Club employs a teacher of cooking, who instructs foreign girls in one of the schools. Much of the social work has been directed toward Americanizing the large foreign population, and since the strike in 1912 this phase has received considerable impetus.

ORGANIZATIONS AND INSTITUTIONS CONDUCTING SOCIAL SERVICE IN CITIES AND TOWNS VISITED.

The present era of specialization requires the woman about to enter this profession to consider two questions: first, for what type of social service is she best fitted; and, second, in what kind of an organization can she accomplish the greatest good. Some types of work are characteristic of the institution, as teachers in settle-

ments, nurses in hospitals, or visitors in children's placing societies, while others are to be found in many organizations as investigators, secretaries, matrons, or superintendents. A brief summary, therefore, of the types of organizations which exist in New England towns may be helpful before proceeding to the more important subject of types of social work.

Associated or Organized Charities Societies. Associated or Organized Charities Societies were found in 12 of the 17 cities visited and in 1 of the 9 towns. Apparently, only cities of 90,000 population or more have well-organized charities societies with several workers. Boston has the largest association, with a force of 55 workers as compared with a total of 87 in all the cities visited. Leominster with a population of 17,580 was the smallest community visited supporting an Associated Charities organization, and there but one agent was employed.

A general or executive secretary is usually in charge of the organization. She may have one assistant or more in addition to the district secretaries and those who are serving an apprenticeship. The work of these societies is to visit all needy families reported in the community and to bring about the co-operation of all agencies for the upbuilding of the family group.

District Nursing Associations. Practically every community affords a District or Visiting Nursing Association with one or more workers, and frequently it is the only form of social service in small towns, as is the case in six of those visited. These associations are usually maintained by private philanthropy, and endeavor to care for those who are ill, but unable to employ a nurse for full time. There are 48 district nurses in Boston in addition to 34 school nurses, but in no other cities investigated, with the exception of Providence which has 34 district nurses and a visiting dietitian, are over 12 nurses employed, as in Cambridge, and only one in Fall River, Fitchburg, Medford, and Everett. A total of 127 district nurses were found in this survey. The number of nurses supported seems to depend not so much upon the size of population as upon the generosity of the community.

Organizations for the Betterment of Children. Among the children's organizations are the Massachusetts Society for the Pre-

vention of Cruelty to Children with headquarters in Boston and branch organizations throughout the state, represented in 4 cities and towns studied; the Children's Aid Society, established in Boston and New Bedford; the Children's Friend Society of Worcester; and the Children's Protective Society of Portland. The state employs a number of visitors and investigators whose work is to supervise minor wards, and the city of Boston maintains a Department of Children's Institutions with six visitors. Two other societies in Boston are also concerned with the placing-out and supervision of children, the Society for the Care of Girls and the Children's Mission to Destitute Children. All of these societies assume the care of poor children, and the 58 workers employed are engaged in finding suitable homes for them and carefully guarding their welfare.

In addition to the above organizations there are societies which, like the Children's Country Week in Boston, arrange for summer outings and secure homes in the country or on farms where children may be sent for brief vacations. This society, the only one of its kind for which we have data, has five regular workers and a large number of volunteers. There are also day nurseries in all the large cities where children are cared for while their mothers are at work. Thirteen nurseries were visited, and data obtained concerning the 39 women employed in them. Four of these nurseries are located in Boston, two each in Providence and New Bedford, and one each in Worcester, Fall River, Lynn, Lawrence, Somerville, Malden, and Brookline.

Playgrounds. The establishment of playgrounds is one of the recent forms of social work. In Boston and Cambridge we find a few playgrounds under the supervision of settlement houses, whereas here and elsewhere there are playground associations or the work is supported by city departments, school departments, or clubs. Playgrounds were found in the following cities: Boston, Providence, Worcester, Fall River, Lowell, Cambridge, Lynn, Lawrence, Somerville, Portland, and Malden, and in the town of Framingham. The largest number of playground workers reported for one city is 100 in Boston. Providence comes second with 70 workers. Worcester has 63; Cambridge, 20; Somerville, 12; Portland, 8; and the other cities, a smaller number. The work

is largely in the summer, although it runs through the spring and fall in Boston, and in one other city industrial classes are organized during the winter months.

Settlements. Settlement houses or various kinds of settlement activities were found in most of the larger localities. In some of the 22 organizations visited in Boston the work consists almost entirely of industrial classes, while there is a variety of interests in others. Thus in several settlements, in addition to the regular classes and neighborhood visiting, workers will be found engaged as probation officers, managing playgrounds, milk stations, dispensaries, and fresh-air outings, or acting as school visitors. This multiplicity of interests exists also in other cities, as the settlement house aims to minister to the needs of its community and thus follows distinctive, independent lines. As might be expected, Boston has by far the largest number of settlement workers, although complete returns from each settlement could not be obtained. But women are very much in the majority, both as paid and volunteer workers. Thus we find 78 salaried women as opposed to 37 men, and 472 women volunteers as compared with 126 men.

Settlements were also found in Providence, Fall River, Cambridge, New Bedford, Lynn, Portland, Salem, Malden, Watertown, Waltham, and Milton, having about 290 workers, including volunteers. Only one of the two settlement houses in Providence was visited. It is the outgrowth of a working girls' club, and its service is chiefly along that line. In Fall River the Women's Union does most of the settlement work of the city, having a Woman's Exchange, a gymnasium, a girls' club, and various classes. Cambridge supports five organizations which conduct classes, but only two of these are regular settlements. Of the three organizations in New Bedford, two have classes, and the third, the Union for Good Works, has also a women's exchange department and a relief investigator. Portland reports only one settlement house with a force of two paid workers, though there are some 60 volunteer assistants. Two societies in Salem follow similar lines, although one deals particularly with women, maintaining an employment bureau in addition to various classes. The following communities report only one or-

ganization doing settlement work: Lynn, Waltham, Malden, and Milton.

Hospital Social Service. A type of philanthropy closely allied with settlements is conducted by hospitals and dispensaries. This field is of recent development, and bids fair to play a most important part in community welfare work, but thus far we find definite organized medical social service only in the hospitals and dispensaries of the larger cities. In the smaller communities the district nurse supplies the need to a large degree. The social service departments of one hospital and two dispensaries in Boston were visited, as well as of one hospital each in Cambridge, Worcester, and Fall River. Data were obtained from 28 workers, 25 of whom are in Boston.

TYPES OF WORKERS IN SOCIAL SERVICE.

Through this survey the following types of workers were found to be those of especial importance: visitors, including church visitors and those connected with children's placing-out societies; investigators; associated charities secretaries; medical social workers, including district nurses, school nurses, social workers connected with hospitals, and nurses employed in other similar agencies; settlement workers; club leaders; teachers of industrial classes; playground supervisors and assistants; Young Women's Christian Association secretaries; matrons of institutions; probation and attendance officers; and visitors to girls on parole. These groups are considered separately because of the wide differences in training demanded and the variety of opportunities awaiting those who enter the several fields.

Visitors. The responsibilities of the visitor and of the investigator are so closely allied that in some organizations the duties of both are performed by the same person. This is especially true in children's societies, where the homes in which children are to be placed must first be investigated and later visited at definite intervals.

Data were obtained from 82 visitors, 53 of whom are employed in children's organizations, 16 in churches, 11 in settlements, 1 in a day nursery, and 1 in a visiting nursing association. In all

cases their work is: (1) neighborhood visiting, as required by settlements; (2) friendly visiting, as among the churches; (3) the visiting preliminary to placing out children and their acceptance in nurseries and homes. Forty-three of these visitors were trained at a school for social workers; 14 were appointed under civil service; 10 of the church visitors had had no specific preparation, while three had attended a Bible school, and one, who was a Sunday-school visitor, had followed a kindergarten course. The best-paying positions demand workers from a school of philanthropy or with considerable experience. Even for the position of church visitor, which in most cases up to the present time has not made specific demands of its candidates, we find that previous training, either at a Bible school or at a school for social workers, is desired, and that the salary offered usually corresponds to the amount of schooling received.

No religious qualifications for visitors are reported except for church visitors, who, in all cases, are members of the church employing them. One settlement house claims that women of the Roman Catholic faith would be useful, as the community is largely Romanist.

We find salaries for visitors ranging from \$130 a year, which is paid to a visitor employed two mornings a week by a day nursery, to \$1,200 a year earned by two women in children's organizations. Of the 64 visitors for whom salaries were reported, 39 began on \$700 a year or more, 18 on \$600, and seven on less than \$600, but four of the last group were not employed over one-half of the time. In 49 cases salaries advanced to \$800 or \$1,000, and two are reported as being \$1,200. The church worker alone seems to have difficulty in obtaining an advance in salary, due, doubtless, to the unorganized status of the profession and lack of definite standards.

In addition to the above group Boston has about 14 school visitors who work for nine schools. They are employed by private organizations, and in all but two cases give only part time to visiting, devoting the rest of the time to settlements. All have had either specific training or years of experience as social workers. Information on salaries was not available, but in two cases beginning salaries of \$800 were reported. While the posi-

tions are now dependent upon private philanthropy, many schools feel the need of such officers, and are asking to have them appointed. Thus, while school visiting is in an experimental stage, it seems likely that in the future it may offer a field for many women who have been well trained.

Investigators. Information concerning eight investigators was obtained for this survey. Four of these are employed by children's organizations, two by day nurseries, another does constructive work for a tuberculosis society, while the fourth makes inquiries for a settlement preparatory to giving relief. Investigators for children's organizations look up homes before children are placed in them, inquire into cases of cruelty to children, and do some court work.

Two of the investigators mentioned above have received training at a school for social workers; one, who is a relief visitor, has attended a medical school, and was employed during the Pittsburgh Survey. Definite data for the others are lacking. Of the eight reporting, three earn \$1,200 or over, two began on \$600 and advanced to \$900, and the other three work only part of the time, one of them receiving \$300 a year, another \$10 a week, and the third \$2 a day. The chances to secure \$1,400 are good, and one of those in the \$1,200 a year group has an opportunity to rise to \$2,000.

The investigator found in this survey is not one who conducts industrial research, hence the training required is not typical of the group. Trained investigators are employed by such associations as Child Labor Organizations, the Consumer's League, the Women's Trade Union League, research bureaus, various state and federal bureaus, and special state commissions on minimum wage, child labor, industrial education, and industrial conditions whose work deals largely with economic, industrial and social studies. Many of them have received such specific preparation for their work as is given by the Research Department of the Women's Educational and Industrial Union and the Research Departments of the Chicago School of Civics and Philanthropy and the St. Louis School of Social Economy. For example, the Women's Educational and Industrial Union offers yearly three fellowships of \$500 each to graduates of approved colleges. The

Fellows, having received a year's training in methods of investigation and interpretation of results, go out to positions of various kinds. None are placed at less than \$800, and some get as high as \$1,200 the first year, depending somewhat on the maturity of the woman and the type of work which she undertakes. In several years those who have proved efficient have earned from \$1,500 to \$1,800, with opportunities for further advancement.

In Associated Charities organizations the work of visitors and investigators is combined in the district secretaries, of whom there are 87 in the cities and towns studied, while two societies employ visiting housekeepers in addition. In those places where the work is well established specific qualifications with regard to training are demanded, and in at least two associations definite preparation is given by the general secretary in charge. Schools for social workers have recently arranged courses for district secretaries, and one organization offers apprenticeships covering a period of three years, for which an agreement is made. From three to five workers are taken on each year, and are paid \$500 the first year, \$600 the second, and \$660 the third.

The salaries of Associated Charities workers for whom we have data range from \$500 to \$1,500. Two are paid under \$500, but their duties are mostly clerical, and one serves only part of the time. Of the general executive secretaries reporting, three receive \$1,200 per year, and one \$1,500. The majority of the district secretaries earn from \$600 to \$900, and the two visiting housekeepers \$600 and \$900 each. The opportunities to advance both in pay and position are exceptionally good, for at present the demand for capable workers, especially for the executive positions, far exceeds the supply.

This organization offers almost unlimited opportunity both for part-time and volunteer workers. One association has some 800 volunteers, and says it could use another 800. If a volunteer gives full time, she may secure training similar to that received by a district secretary, and in time may advance to a paid position.

Medical Social Service Workers. The field of medical social service is wide in scope, and includes several types of workers: the district

nurse, the school nurse, the hospital social agent, and nurses employed by other societies interested in the betterment of health. District and school nurses must have a nurse's training, which was formerly considered adequate. In the future, however, it seems probable that, when full recognition is given to this great opportunity for social service, a course in social economics will be added in order to equip students for their work.

1. District or Visiting Nurses. The district nurse is the most popular social worker, if we judge by the number of communities in which she is employed. A total of 127 district nurses were found during the survey, and four others are included who are superintendents of nursing associations in larger cities. All of these are graduates of training schools in reputable hospitals, 54 have had post-graduate courses and two have had some experience in settlements. Because of the technical knowledge demanded, there is little chance for the untrained worker in this field.

We find that \$600 is the lowest salary given. The majority are paid between \$700 and \$900, but six of those for whom we have data receive \$900 or over. Of the four superintendents reported, one earns \$900, another \$960, and two \$1,200. While the stipends are fairly good in the beginning, apparently the opportunities to advance are not as good as in some other fields. The best outlook is for those who have either executive power which will enable them to become superintendents of nursing associations or ability to enter specialized nursing, such as medical social service, preventive work, as in the prevention of tuberculosis, or work for infants, as in the Milk and Baby Hygiene Associations.

2. School Nurses. Closely connected with district nurses are the school nurses, of whom 39 were included in this study. This type of a nurse should be interested in social and educational as well as medical uplift, as her opportunities for social service are even greater than those of the district nurse. Her duties consist chiefly in visiting the schools in her district at stated times, in being present and assisting when the medical inspector examines the children, and doing a vast amount of "follow-up" work in

the home. It is there that the nurse finds excellent opportunity for social betterment, as her entrance to every home is assured through her interest in the child, but perhaps her best service is in the close connection she makes between the home and the school.

Every school nurse included in the study had graduated from a training school. Although the most important phase of the work is social in character, this was not at first recognized, but in the future it seems probable that more and more preparation as a social worker as well as a trained nurse will be required.

As a result of recognizing only a part of the service which the school nurse can and should render, the salaries paid thus far have not been as high as those given district nurses. Thus we find that, while no school nurse earns less than \$600, all but one are paid between \$600 and \$800, the odd one receiving \$900. There is little doubt that opportunities will multiply with the establishment of school nursing departments, and the consequent demand for superintendents of these departments.

3. Hospital Social Workers. A comparatively new form of medical social service, in which the emphasis is placed on social rather than medical training, has developed in connection with the out-patient division of the larger hospitals. The duties are to assist the physician at the clinic, explain the doctor's orders, visit the patients in their homes, and see that they have such help as is necessary to make them strong and self-supporting.

This type of service was found in five hospitals and two dispensaries. Information was obtained for 28 workers, 25 of whom were in Boston. Nineteen of these have had regular nurse's training, nine a social worker's course, and one had also attended a medical school. The ideal preparation for this field of work would be that of the social worker with supplementary nurse's training. But this combination is rare, and the consensus of opinion seems to indicate that the former can usually acquire in the clinic such knowledge as her work demands, especially if she has a keen medical interest. The School for Social Workers in Boston has recently established a special course in hospital social service.

These workers are well paid. Of those reporting their salary we find that 13 are earning between \$1,000 and \$1,500, and eight are paid from \$600 to \$900, six of whom get \$800 or \$900. Opportunities to advance are also excellent. In Massachusetts the heads of social service departments rise to \$2,000, while outside the state as high as \$2,500 is reported for organizers of these divisions in hospitals.

4. Nurses employed in Agencies for the Betterment of Health. In addition to the district nurses, the school nurses, and the social service agents in hospitals, we have data for nurses doing special work. Twelve of these nurses are employed by milk and baby hygiene associations and four by anti-tuberculosis societies. The former promote the distribution of pure milk, prepared at a nominal cost according to special formulæ, keep careful watch over the babies, and visit them in their homes. The work of the latter consists chiefly of visiting and caring for tuberculosis patients in their homes.

All but one of these special nurses are graduate nurses, and twelve have had training along the lines they are now following. The majority, 12, are paid \$900, and one, who is the head of an organization, gets \$1,200, while two receive \$864 and \$720 respectively.

Medical social service is new, but it is developing rapidly all over the country, and there is a greater demand for trained workers in its every phase than can be supplied. The outlook is perhaps greater than in any other field, and the salaries good, but the vocation is of the highest type, and demands professional training along one line at least and often along two lines.

Settlement Workers. Settlement work makes diversified demands in contrast with the highly specialized requirements of medical social service, a large part of it having to do with industrial classes and clubs. The majority of settlement workers, exclusive of teachers, receive their preparation in settlement houses, many of them as volunteer workers. This has probably come about because settlement work is of earlier origin than many other kinds of social service, and thus antedates the schools of philanthropy. However, a number of the workers in this survey have had special training, and the tendency to emphasize its value is in-

creasing. While the data on salaries are not complete, we believe that the general situation shown is correct; namely, that the opportunities for advancement both in position and pay are fair, although not as good as in some other fields.

Settlement workers may be classed as head and assistant workers, club leaders, and teachers.

1. Head and Assistant Workers. These positions command fair salaries. One settlement reports an opportunity to advance to \$1,500. The head of another is paid \$1,300, four settlements offer as high as \$1,200, and one \$1,100. The usual salary of a head worker is \$1,000, and we have found four who get this amount, while another earns \$936. Eight receive from \$600 to \$800, and seven from \$300 to \$500. The latter stipends are not so low when one considers that some, and in many cases all, living expenses are given in addition. To summarize, 12 settlements pay a maximum of \$1,000 to \$1,500, while 15 do not exceed \$800.

2. Club Leaders. Six directors of clubs for girls were found in connection with settlement houses, but apparently this type of work has not been well organized as yet. Three had received some training, one at a school for deaconesses, another at a physical culture school, and the third at a Chicago settlement. The highest salary, \$1,000, was given to one director, another got \$780, and a third \$600. Two others worked only part time, and one of these was paid \$250 a year, and the other \$1 a night. The sixth director gave her services. This field should offer good possibilities for the woman interested in young girls, and pioneers are needed.

3. Teachers. Most, if not all, settlements have industrial classes of one kind or another, so that the teacher is an important factor in settlement work. All teachers here included have had special training in their particular fields at schools offering such courses. Only five of those for whom we have data are given a definite salary, the others being paid by the lesson, hour, or evening. One of the five, a kindergarten teacher, receives \$900, another, a gymnasium instructor, \$800, and the third, a teacher of domestic science, \$600, and the other two, who teach kindergarten and household economics, began at \$480 and have advanced

to \$720. The lowest price paid for a lesson is 50 cents, but the usual sum varies from \$1.50 or \$2.00 a lesson to \$4 an evening. Dancing teachers command from \$2 to \$4 a lesson or \$5 an evening.

Playground Workers. Playgrounds are closely associated with settlements, both in the class of persons dealt with and in the type of teachers demanded. As the playgrounds are usually open about eight weeks in the summer, many of the workers teach during the winter months, and such training and experience is frequently their only equipment. A few, however, have had kindergarten training or have attended a physical training school. In one city the supervisors of playgrounds must be graduates of schools of physical culture.

Of the workers included in this study, 146 earn from \$40 to \$60 a month, 98 from \$30 to \$35 a month, and three supervisors over \$80 a month. In one city playground workers are employed from April 1 to December 1, being busy all day during the summer vacation. In the spring and fall they teach only after school hours, when their pay is reduced about half. The opportunities for the well-trained woman are good, but the short season requires that one shall have other work during the rest of the year unless one wishes only part-time employment.

Young Women's Christian Association Workers. No study of the field of social service would be complete which did not include the work done by the Young Women's Christian Association, but it must be considered in a group by itself because of the religious requirements. Seven of these organizations were found in the larger cities. Each association has its general secretary and assistant secretary, four have lunch-room directors and physical directors, two have employment secretaries, and two have Traveller's Aid agents who meet incoming trains. In addition to the regular workers three of the associations have industrial departments, two employing not over six teachers in various lines, while the third has about 18 teachers in the different branches of domestic science, stenography, typewriting, and household service.

The majority of these women have had years of practical experience, some having prepared at a regular training school, in-

cluding all general secretaries but one, and a few have attended college. The demand is more and more for college women who have had specific courses offered by the Young Women's Christian Association. Three of the general secretaries report a salary of \$1,000, one \$1,150, one \$1,200, and one \$900. The stipends of the other workers range from \$300 and board up to \$900. Salaries in one organization range from \$400 to \$1,200 in addition to a home, while as much as \$1,500 is given those who do not live at the association. While these salaries are fair, there is opportunity for the trained woman to advance to positions in larger fields, carrying with them more responsibility and higher incomes.

Matrons. Up to the present time the matron of an institution has usually occupied the position of housekeeper, but a large amount of social work is also required of her.

Matrons are found in homes for adults and for children, in orphan asylums and day nurseries, in hospitals, in reformatories, and usually in Young Women's Christian Association buildings. The variety in type of institution should call for widely different kinds of training, as it is quite evident, for example, that the matron of a day nursery should have very different equipment from a matron in a home for aged people. Yet, apparently, matrons as a class have resisted victoriously thus far the establishment of specific demands with regard to education either in household economics or in social service. Thus we find that, of the 76 matrons for whom we have data, only 14 have had any training whatever, and only five of these have attended courses in household economics. The majority have been fitted only through practical experience, but the day is fast approaching when the woman who would become a matron of an institution must have specific preparation in household economics and institutional management as well as in social service. Or the institution may find it desirable to divide the duties of housekeeper from those of superintendent, requiring that the one shall be a household economist and the other a social economist.

Matrons without technical education receive salaries usually paid to housekeepers, always including board and room. Of those for whom we have data, the majority, 29, are paid from

\$5 to \$7 a week in addition to living. Two receive under \$5, and two others their living only. Thirteen earn from \$8 to \$12 a week, two \$1,000 a year besides living, another \$780, and the fourth \$700. Women who have had some preparation command the highest salaries, which seems to indicate a new field for the trained woman.

Social Workers in State Institutions. All of the returns with regard to employees in State institutions have not yet been received, hence the data are somewhat meagre.¹ This study includes, however, information concerning 10 probation officers, 9 visitors of girls on parole, and an attendance officer whose duties are similar to those of a truant officer. Thirteen of the probation officers and all of the visitors have attended training schools for social workers, but the other four probation officers and the attendance officer have had only practical experience. Probation officers command high salaries. Of the nine officers reporting, seven are paid from \$1,200 to \$1,700 (four of whom get \$1,200, two \$1,500, and one \$1,700), one earns \$800, and the other gives her services. The visitors to girls on parole receive from \$700 to \$1,000. Thus these fields of work offer great possibilities for mature women specially fitted for social work.

CONCLUSIONS.

It may be helpful to women contemplating social service to compare the various fields and types of social service with regard to (1) the number of women employed, (2) the amount and kind of training required, (3) the qualifications demanded, (4) the variations in salary as well as in opportunity for advancement, and (5) the chances for part-time and volunteer work.

(1) Settlements take the largest number of women, about 800, including teachers of industrial classes, while playgrounds come second, with 284 workers. The field of medical social service is well represented by 210 workers, of whom 127 are district or

¹A special study of civil service positions is now being prepared by the committee, in which fuller data will be included.

visiting nurses. One hundred and forty-two Associated Charities agents, 97 women in children's societies, 76 matrons, and 70 visitors were found through this study, 10 probation officers, 8 investigators, 9 visitors to girls on parole, 6 directors of girls' clubs, and 1 attendance officer.

(2) The training received by these social workers is extremely varied. Investigators and social workers in hospitals stand at the head of the list of those having specific preparation, and matrons at the foot. The majority of investigators are college graduates with one year of advanced study. Hospital social workers need two distinct types of training,—training in social work with supplementary nurse's training or nurse's training supplemented by training in social service. All nurses reported have completed a regular course, and nearly one-half have had additional courses either in social work or in the specific lines which they are now following. Visitors as a class have attended social service schools with the exception of church visitors. Only four of the 14 church visitors have pursued studies bearing on their religious duties. A large number of the settlement workers have served apprenticeships as volunteers or assistants, the others have attended schools of philanthropy. The teachers of industrial classes have all had specific preparation in their particular subjects. Playground directors are recruited from the ranks of teachers, but a number have had kindergarten or physical culture courses. Associated Charities secretaries have usually served apprenticeships, but in the future they will probably be able to secure the necessary courses at schools for social workers. The Young Women's Christian Association provides for the equipment of its workers, and we find that most of the women holding responsible positions in these organizations have attended an Association school. Probation officers usually offer regular social service qualifications. Matrons thus far have had no preparation, but the tendency is toward definite requirements in household economics and institutional management. Thus it is seen that the many fields of social service are now demanding professional education from workers, and as a corollary never before have there been so many opportunities to secure training in social economics.

(3) Qualifications with regard to the age and religion of social workers are not insistent nor universal, but the Young Women's Christian Association employs Protestants only, usually of evangelical faith, and church visitors must be members of the churches employing them. A few homes prefer matrons to be Protestants. Two day nurseries expressed the same desire, and two Catholic societies demand Catholic workers.

A few organizations have expressed preference for women 25 years of age and over, and a still smaller number require more mature women. The question of age is not of great significance, however, as proper social training cannot be secured until she is over 20 years of age.¹

(4) As might be expected from the requirements, hospital social workers and investigators receive the highest salaries and have the best opportunities for financial advancement. Thus we find that 13, or nearly one-half of the hospital workers for whom we have data, report a salary between \$1,000 and \$1,500, and six earn either \$800 or \$900. The exceptional woman who can organize a social service department in a hospital commands from \$1,500 to \$2,500. Trained investigators receive usually \$1,200 a year. Thus seven of those included have attained this salary, and four even more, one earning \$1,800. Six get between \$900 and \$1,100, and two others \$800.

Head workers in settlements come next in amount of remuneration, and are followed closely by probation officers and Young Women's Christian Association secretaries. Thus 12 of the head workers in settlements earn from \$1,000 to \$1,500, and 15 from \$300 to \$800, but in most cases part or all of the living (usually room rent) is given in addition. Probation officers receive \$1,000 to \$1,700, \$1,200 being the average. Four of the Young Women's Christian Association workers earn between \$900 and \$1,200. The rest are paid \$300 to \$1,200 in addition to living, and salaries up to \$1,500 are offered in one Association when living is not included.

¹ For a discussion of the type of work and worker required in each field, see special articles by experts in *Vocations for the Trained Woman*, Part I.

TABLE 2. SHOWING TYPE OF WORK AND YEARLY SALARY OF FORMER POSITIONS HELD BY WOMEN REGISTERED WITH THE APPOINTMENT BUREAU OF THE WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION.

Type of Worker	NUMBER OF WOMEN RECEIVING SPECIFIED YEARLY SALARY OF										Total								
	\$180	\$300	\$336	\$360	\$384	\$420-	\$450-	\$480	\$600	\$648-	\$660	\$700-	\$759	\$800-	\$899	\$1,100	\$1,200	\$1,320	
Associated Charities Workers	-	-	-	-	-	2	1	2	1	-	-	-	-	-	-	-	-	-	6
Club Leaders	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	2
Investigators	-	-	-	-	-	1	1	1	-	1	-	1	-	2	-	-	-	1	7
Playground Workers	-	-	1	1	3	2	1	2	1	-	1	-	1	-	-	-	-	-	13
School Nurses	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
Settlement Workers	-	1	-	-	2	-	-	6	2	-	4	1	2	1	1	-	-	-	20
Visitors	-	-	-	-	-	-	-	5	2	-	5	3	3	-	-	-	-	-	18
Young Women's Christian Association Workers	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-	3
Total	1	1	1	3	4	16	9	4	12	5	10	1	2	1	1	2	1	70	

Visitors and district nurses have similar financial prospects. Thus 49 of the visitors get from \$800 to \$1,000, and two \$1,200. A majority of the district nurses are paid from \$700 to \$900, and ten, including four superintendents, from \$900 to \$1,200. The district secretaries of Associated Charities organizations receive from \$600 to \$900, and the general secretaries from \$1,200 to \$1,500. The opportunities to advance in this field are exceptionally good.

More than half of the nurses who are employed by Milk and Baby Hygiene Associations or Anti-Tuberculosis Societies receive \$900. Three are paid less than \$900, and one \$1,200. School nurses command between \$600 and \$800. Many playground workers earn from \$40 to \$60 a month, a few between \$30 and \$35 a month, and a few supervisors over \$80 a month.

Teachers of industrial classes are rarely employed on a salary basis, but rather by the lesson, the hour, or the evening. These prices range usually from \$1.50 to \$2 a lesson or \$4 an evening, but dancing teachers earn from \$2 to \$4 a lesson or \$5 an evening.

The majority of matrons are paid from \$5 to \$7 a week besides their living, a few get from \$8 to \$12 a week, and four from \$700 to \$1,000 a year in addition to living.

Only one attendance officer is reported who has a salary of \$750. This is a new field of work for women, however, and in the future, when the work has been fully established, remuneration will undoubtedly be considerably higher.

For the purpose of determining how nearly representative are the salaries quoted above, the following table is given, which shows the type of work and the salary paid in social service positions held by 70 women registering with the Appointment Bureau. Salaries given in this table are somewhat lower than those discussed above, due doubtless to the less settled status of the women who are seeking positions through the Appointment Bureau in comparison with those who are already established.

The opportunities for salaries in social work are further illustrated by the following table, which is based upon the orders received by the Appointment Bureau from prospective employers:—

TABLE 3. SHOWING SALARIES OFFERED IN SOCIAL WORK, BASED ON ORDERS RECEIVED FROM EMPLOYERS AT THE APPOINTMENT BUREAU.

Salary of \$240	2
Salary of \$250	2
Salary of \$260	1 ¹
Salary of \$300	3 ²
Salary of \$300 to \$360	1
Salary of \$330	1
Salary of \$336	1 ³
Salary of \$360	1 ⁴
Salary of \$360 to \$480	1
Salary of \$480	1
Salary of \$480 to \$600	1
Salary of \$520	1
Salary of \$600	6
Salary of \$600 to \$900	1
Salary of \$700	4 ⁵
Salary of \$700 to \$1,000	1
Salary of \$720	6
Salary of \$720 to \$900	2
Salary of \$780	2 ⁶
Salary of \$800	1
Salary of \$840	1
Salary of \$900	1
Salary of \$900 to \$1,200	1
Salary of \$936 to \$1,040	1
Salary of \$1,000	1
Salary of \$1,020	2
Salary of \$1,200	4
Salary of \$1,980 (\$165 a month)	1
Total	51

¹ Summer employment.

² One for summer employment only, the other two to have board and room in addition.

³ With home. ⁴ With room.

⁵ Two to have room and board in addition.

⁶ One to have room and board in addition.

We find from the 51 cases reported in the above table that 28 or 54.9 per cent. can earn \$700 or over in social service positions, and that at least eight, or 15.7 per cent. of these can earn \$1,000 or over. Four of these positions offer \$1,200, and one \$1,980. These salaries compare very favorably with those paid to teachers, as do the opportunities for advanced position and responsibility.

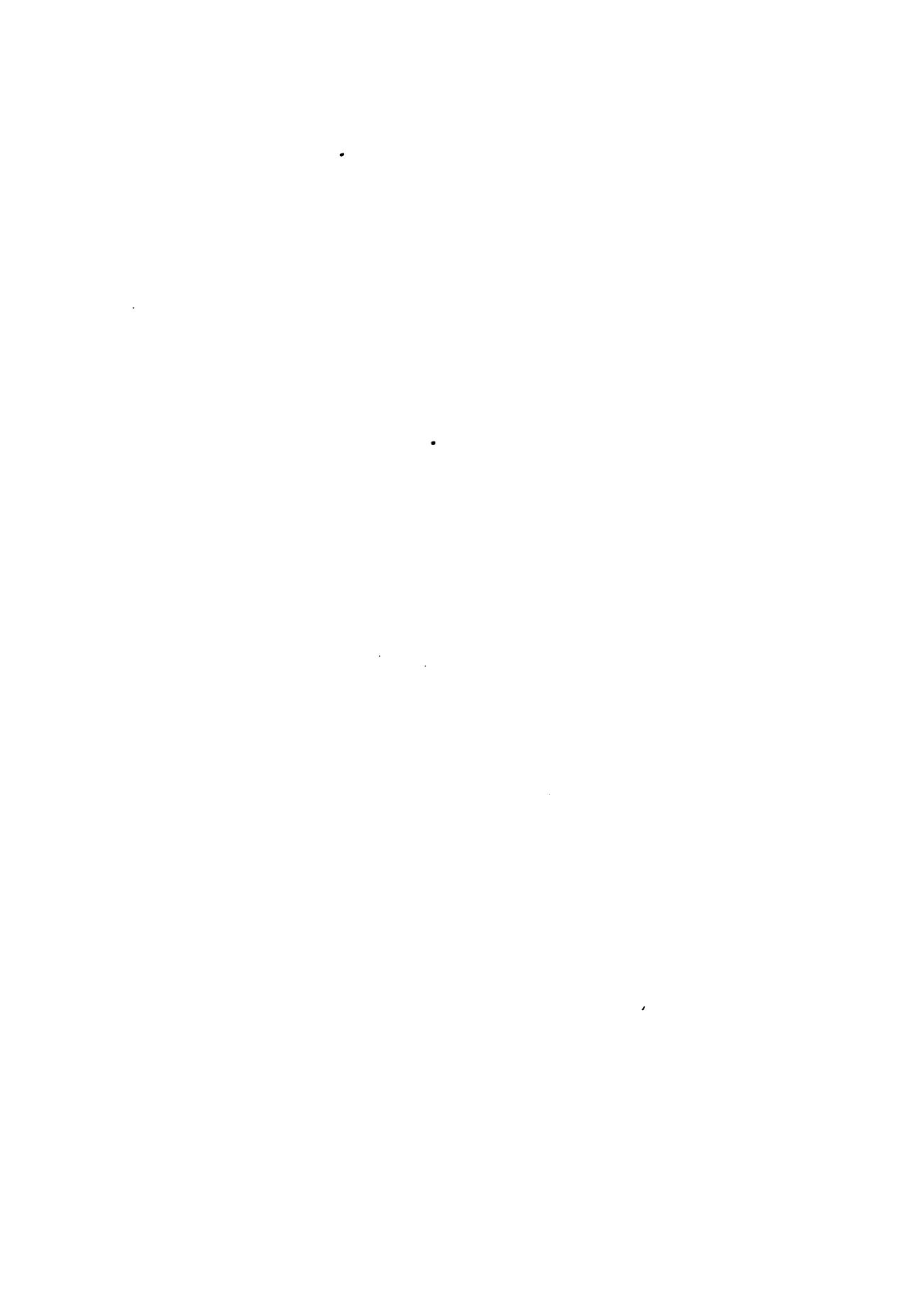
(5) Thus far we have been concerned with the paid worker in social service, but the many opportunities for the volunteer should not be overlooked, for in many instances she becomes a most efficient agent. A total of 117 organizations included in this survey report the need for volunteers, and such organizations as the Associated Charities, settlements, and clubs depend much upon their service for the profession. This situation is a great boon to the young, untrained woman, as it gives her the means of obtaining experience and fitting herself for the profession.

The whole field of social service is demanding specialized training, and the day is not far distant when untrained workers will be welcome only as volunteers. The larger requirements have brought greater responsibilities and almost unlimited opportunities, and the wide scope gives a large choice in kind of service.

CHAPTER III

OPPORTUNITIES FOR WOMEN IN SECRETARIAL SERVICE

MARGARET A. POST



OPPORTUNITIES FOR WOMEN IN SECRETARIAL SERVICE

FOREWORD

HENRY LEFAVOUR

PRESIDENT OF SIMMONS COLLEGE

The development of the usefulness of secretaries from the time when the scribe served those who did not know how to write to the time when his service was required by those who did not have time to write, marks in some measure the progress that has been made toward increasing the scope of individual achievement. More and more the man engaged in business or a profession needs to be relieved of detail in order that he may give his time and energy to matters of larger moment and broader reach, and much of modern progress in business, in the professions, and in education, has been due to the availability of efficient assistance.

As rapidly as this possibility of economy of time is realized, there is an increased desire to make use of trained helpers, and the demand for experienced and capable secretaries is likely always to exceed the available supply. This is partly due to the fact that no normal training is adequate. It must be supplemented by experience, and usually the experience needed is a special fitness for a particular task. Hardly any two positions involve exactly the same duties. The office is as individual as the employer. The personal qualities, the intellectual power, the common sense and judgment that render one person more eligible than another, cannot be created by any school or programme, though they may be quickened, developed, and guided by a proper course of instruction. Certain fundamental studies,

certain arts and methods, certain useful information, may wisely be included in the instruction of the school or college, and out of this training, as out of any other professional training, a certain measure of usefulness will follow, but it will be a matter of individual fitness, based upon this necessary education that will determine the progress toward the highest rewards of this vocation.

But, taken as a whole, the occupation of a secretary is of increasing importance, and it has already established itself as a necessary element in our busy life and as one of the largest contributions toward efficiency. It is a dignified and worthy profession, and inevitably its recognition and reward will advance as its possibilities are appreciated.

The following pages present an interesting study of the present opportunities for secretaries, their varied duties, and their pecuniary compensations. While the data upon which the study is based are limited, consisting mainly of the experience of the graduates of a single institution and of the registration of a single appointment bureau, the conclusions present an accurate view of the general status of the profession, and would be applicable, at least relatively, to other parts of the country. The investigation is of great value both to young women who are looking toward an independent livelihood and to all who are interested in vocational education.

OPPORTUNITIES FOR WOMEN IN SECRETARIAL SERVICE

INTRODUCTION.

Purpose and Scope of the Investigation. The aim of this study is to present to the girl or woman entering upon secretarial service the scope and breadth of the field, the duties that come within each day's work, the preparation and training required, the opportunities for the future, the salaries attached to various types of positions, and the value of such service as an occupation and as a training school. Based on the attitude of the employer, we desire to show the qualities essential for an efficient secretary and the requirements for specific lines of work. At the same time it is hoped that by stating the advantages, disadvantages, limitations, and possibilities of secretarial service, drawn from the experience of secretaries themselves, this study may serve as an incentive or as a warning, and so direct women into work for which they are best fitted.

Various problems confronting the Appointment Bureau of the Women's Educational and Industrial Union have led to this investigation of the secretarial field. But little definite information concerning this occupation and its requirements exists, although it is one which great numbers of girls and women are continually entering. With the increasing interest in vocations for women other than teaching, great stress has been laid on secretarial work, its attractions, high salaries, and pleasant duties, and this information has too frequently been based on an inexact knowledge of existing conditions. A second reason for making the study is the necessity of presenting to the large number of college graduates who are not looking toward teaching, but favor secretarial work as having a "literary flavor," a knowledge of the value of stenography and typewriting in other vocations. Lastly there would appear to be great need for larger and more intensive studies of the stenographer's field be-

cause of its scope and constant increase. According to the last census returns (1900) in Massachusetts alone there were 6,431 women 16 years of age and over employed as stenographers, and of this number 2,167 were employed in Boston, while 85,086 girls and women, 16 years of age and over, were employed as stenographers throughout the United States.¹ The latter number represented 1.8 per cent. of the total number of gainfully employed women over 15 years of age, so that stenography as an occupation ranked 18th among the leading occupations for women, the order being as follows: (1) servants, (2) textile workers, (3) dressmakers, (4) laundresses, (5) teachers, (6) farmers, (7) housekeepers, (8) saleswomen, (9) seamstresses, (10) nurses, (11) trained nurses, (12) unskilled laborers, and (13) stenographers and typewriters.

The increase in the number of women 15 years of age and over employed as stenographers during the decade (1890-1900) amounted to 64,698, or 305 per cent., as compared with an increase of 82,066, or 33.4 per cent., of those employed as teachers; 14,051, or 167.2 per cent., of those employed as telephone and telegraph operators; 8,225, or 116.7 per cent., of those employed as literary or scientific workers; 52,271, or 18 per cent., of those employed as dressmakers; and 24,372, or 40.2 per cent., of those employed as milliners.²

Of the total reported as 16 years of age and over, 63 per cent. were from cities of at least 50,000 inhabitants, and 36 per cent. from smaller cities and country districts, indicating that the problem is mainly one of the larger cities. Likewise, it is a problem of the young girl, the largest proportion of stenographers being between the ages of 16 and 24. Of the 85,126³ stenographers who were reported in 1900 as 16 years of age and over, 63.2 per cent. were from 16 to 24 years of age, 30.5 per cent. from 25 to 34 years of age, while only 5.1 per cent.

¹ Special Reports of Census Office, *Statistics of Women at Work*, 1900, pp. 82-83, 102-107, 188, 222.

² *Ibid.*, p. 39.

³ This number, 85,126, includes stenographers enumerated in Alaska and Hawaii. Special Reports of Census Office, *Statistics of Women at Work*, 1900, p. 105.

were between 35 and 44 years. From these figures it is apparent that a study of this kind deals with women from 16 to 24 years of age, by far the larger group, almost two-thirds, being in this age group. On the other hand, we find a peculiar and significant proportion, almost one-third, between 25 and 34 years of age. If the occupation retains a large number of older workers and at the same time offers advanced positions of responsibility, we may well conclude that by improvement in training, the mature woman will come to hold desirable positions, working up to them through a series of increasingly important places.

Within the ages 16 to 34 will be found a great divergence in type of worker, based on the wage scale, namely, the large class of \$6, \$8, and \$9 per week stenographers, those receiving \$10, \$15, and \$18, and the \$1,200 and \$1,500 per year secretaries. As it is the purpose of this study to present chiefly the opportunities for the trained woman in and through secretarial service, the great rank and file of lower paid stenographers are not considered, but are left for further detailed and exhaustive study. Thus no woman receiving under \$10 per week is here included.

Sources. The Appointment Bureau of the Women's Educational and Industrial Union contains in its files records of about 1,500 girls and women who have registered with the Bureau for secretarial and stenographic work. These record blanks, filled out by the applicant, call for such detailed information as the Bureau has found by experience to be most helpful and necessary for placement purposes. At the same time they form a source of valuable sociological data, upon which can be based a study of occupations. It may well be considered an exceptional group of recorded experiences, both in numbers and in value of data given. The record blank calls for a list of previous positions held, and salaries received with references for each. In this way it is possible to check up the salaries given by the applicant with those reported upon the reference blank filled out by the employer, and at the same time to secure the employer's opinion concerning the position listed.

The value of such a group of records in the educational work of an appointment bureau is apparent. By a slight modifica-

tion of the blanks upon which this study has been partly based, the use of the records for purposes of study would be greatly increased. With the establishment of new appointment bureaus in the larger cities of the country, bureaus in which the most valuable work is educational, there will be amassed quantities of data concerning a great variety of vocations for women. In order that these stores of information may contribute to the placement and educational work of such bureaus, the importance of keeping uniform, full, and detailed records of applicants cannot be overestimated.

Of the 1,500 records of stenographers and secretaries in the Boston Bureau, 400 were from girls in the \$7 and \$8 per week class, and were eliminated from the study, \$10 per week being the minimum class considered. Eleven hundred records were therefore made the basis of study, and from them varying amounts of information were secured.

Included in this group were 233 college-trained women, the representation being from Smith College (26), Boston University (21), Simmons College (17), and Radcliffe College (13), with scattering numbers from Mount Holyoke College, Wellesley College, Tufts College, Vassar College, Bryn Mawr College, Brown University, Bates College, Oberlin College, University of Michigan, University of Iowa, Cornell University, Syracuse University, and the Universities of Nebraska and California.

A second and very important source of information was found in the reports of 371 women who had attended Simmons College and had pursued the prescribed secretarial courses,—either the complete four-year course, or part thereof, or the one-year course open to graduates of other colleges. In the 77 records of women having had a previous college training, 17 colleges are represented, including in order of numbers Smith College, Boston University, Radcliffe College, Vassar College, Mount Holyoke College, Wellesley College, Tufts College, Bryn Mawr College, Oberlin College, Ohio Wesleyan College, Colby College, Acadia College, Cornell University, Bates College, Wooster College, St. Lawrence College, and the University of Oregon.

In addition to the above sources, interviews were held with 35 men who employ one or more secretaries and with 30 women who

are engaged in a variety of types of secretarial work. The aim of these interviews was to secure the opinion of the person interviewed regarding the duties attached to the position, the training most fitting, the knowledge of any special subjects that would be helpful to employer or employee, the desirable and undesirable features of the work, the salary both minimum and maximum, and the personal qualities most desirable and those requisite for success in the field. Lastly, letters were received in answer to personal letters and questionnaires from some 40 or more women who have been or are in the secretarial field, some of them giving interesting and helpful suggestions and comments. Thus, by means of records, interviews, and correspondence, information varying in amount, sometimes very meagre, sometimes very helpful, was gained from about 1,540 women who have been or are at present engaged in stenographic or secretarial work.

THE SECRETARY.

Definition of Secretary. Webster says, "A secretary is a piece of furniture with conveniences for writing letters and filing papers." It is to be deplored that this definition is often applied by employers who are satisfied with mere mechanical operations. However, it is difficult to define the word "secretary," and to draw a line between the stenographer and the secretary. The stenographer's position, requiring an intelligent knowledge of stenography, combined with accuracy and speed, seems to verge into the secretary's position when the stenographer has made herself valuable to her employer and has been intrusted with a great variety of duties, some more personal, some more responsible, requiring necessarily more initiative and use of executive powers. In this report the word "secretary" is used throughout, though in many cases the individual is purely a stenographer, but by eliminating those receiving a weekly wage of less than \$10—representing the lower grade of stenographic service—the higher grade stenographer may properly be included. The line between the two positions is so indistinct it does not seem feasible to attempt to make it hard and fast.

No school or college can turn out an efficient secretary, but it

can produce an excellent stenographer and it can give a background of intelligence. As efficiency results in advancement in this work, as in every other, the technique of a stenographer cannot be too skilful. A knowledge of stenography and typewriting is a girl's most valuable *wedge* for securing a secretarial position, and we are beginning to realize, too, that secretarial work is a most valuable *tool* for working her way out into broader fields of service.

Time and Cost of Preparation. Among the many reasons why more and more girls become stenographers is the ease with which some necessary training can be secured. Formerly the high school turned out a girl with no tangible asset for earning her living. Now she may combine the study of stenography with other subjects in her four-year course. Then, too, the business schools and business colleges offer full and extensive courses in shorthand, typewriting, book-keeping, commercial correspondence, commercial law and geography, penmanship, English and spelling. Some give special attention to the girl who has had no high school training or only a portion of a high school course. These schools also offer special courses to those partially equipped in technique, who need "speed" drill. The girl desiring higher education may, at Simmons College, combine in a four-year college course, a thorough training in secretarial subjects, with allied cultural academic studies. And for the college graduate we find special courses in stenography offered in the technical institutions and in business schools.

The time required to gain a thorough knowledge of stenography varies from 6 months to a year, depending upon whether shorthand and typewriting are studied alone or in combination with the subjects mentioned above, upon the aptness of the student, and upon the extent of her general education. The classes in the business schools are so arranged that individuals may advance as rapidly as their ability warrants. The cost of a business course as outlined by the best business schools averages \$15 per month. For evening lessons in stenography the charge is about \$5 per month. The evening classes offer opportunity for the stenographer of only mediocre ability to increase her skill in stenography, skill in this sense meaning accuracy, speed, and understanding.

As the girl's opportunities for equipping herself with a knowl-

edge of and skill in stenography have increased, so has the demand for her services. The greater specialization in nearly all types of business and professions and the enlarged scope of detail work offer increasing demand for the girl or woman who is well prepared. With the introduction of the dictaphone and phonograph, whereby dictation is given directly to one of these machines and the records transcribed by the typist, greater stress will be placed on the ability to do intelligent, rapid, and accurate typing. The dictaphone is already used extensively by public and court reporters and in the offices of public stenographers. Its steadily increasing use is an indication of specialization and subdivision within stenographic work.

TYPES OF SECRETARIAL POSITIONS.

In the analysis of the records of the Appointment Bureau and those of the secretaries who prepared at Simmons College, distinct types of secretarial positions appear. These have been grouped according to requirements, duties, salaries, and possibilities pertinent to each type. First, secretaries in business firms of all kinds, banks, publishing houses, stores, and small or large commercial offices. This is the largest group, and one in which the duties are pre-eminently stenographic and clerical. Second, secretaries to doctors; third, secretaries in law firms; fourth, secretaries in educational institutions, including office assistants in college departments, secretaries to professors or executives, and secretaries in private schools and high schools; fifth, secretaries in social organizations; sixth, private secretaries; and lastly, executive secretaries.

*The Secretary in Business Firms, Banks, Publishing Houses, Stores, and Commercial Offices.*¹ It is in this class that the line is most distinctly drawn between the stenographer and secretary, the large proportion being on the side of the stenographer. Here too, will be found the large number of \$8 and \$9 per week stenog-

¹ Salaries are based on 554 records from the Appointment Bureau and 35 records from Simmons College, together with correspondence with individuals and orders for stenographers coming to the Appointment Bureau from employers. For a fuller discussion of salaries see pp. 128-141.

raphers, not included in this survey. The duties are mainly clerical and stenographic, accuracy, speed, and an intelligent use of shorthand and typewriting being the essentials. The great proportion of salaries secured for this group range from \$10 to \$15 per week, after omitting the lower paid group, \$10 and \$12 being the usual salary, \$15 being less common. Citing the group of 43 stenographers which had had 3 years' experience, 83 per cent. received \$10 to \$12 per week. The highest salary was \$17, received by 2. Of 46 stenographers who had had 4 years' experience, 82 per cent. received from \$10 to \$15 per week, the highest salary being \$20, received by 2. Of 48 who had had 5 years' experience, 58 per cent. received less than \$15, 23 per cent. received \$15, and the highest salary, received by 1, was \$20. Of 30 who had had 8 years' experience, 50 per cent. received less than \$15, 30 per cent. received from \$15 to \$25, only 1 received \$25.

While the larger groupings of salaries remain about \$12 and \$15 per week, salaries of \$18, \$20, \$25, and \$30 per week are occasionally paid to the efficient secretary who has by experience gained the qualities making for business success, and has made herself valuable to her firm or employer. The higher paid assistants are the executive office secretary, in charge of the office or stenographic force, or the private secretary who has become valuable to an individual, or the highly efficient stenographer, who is an expert in her line of work.

In banks there is practically no opportunity for advancement beyond the purely clerical positions.¹ In publishing houses, however, it is possible for the girl with some marked ability in literary work to evolve from the stenographer into an assistant in one of the many departments.

As belonging to this class, though differing in outlook, may be mentioned the accountant's assistant.² In a few public accountants' offices a girl beginning as stenographer or book-keeper, with aptitude and liking for accounts, finds opportunity to gain sufficient experience in accounting methods to become an assistant accountant. Here again, through stenographic channels, a new field of work may be opened. Though precedent

¹ Based on interviews with men in 7 banks in Boston.

² Based on interviews with 7 certified public accountants.

would now hamper the woman certified public accountant, if she were sufficiently interested and able in accountancy and possessed those inborn qualities which inspire confidence, a new field might be hers to develop.

Summing up this class of secretaries, ranging from the \$10 stenographer to the efficient business secretary, there is the large group who receive between \$12 and \$15 per week, and who will probably not receive over \$15, and the smaller number who receive \$18, \$20, and over \$20, and who may look ahead to the administrative and executive positions carrying larger salaries.

*The Physician's Secretary.*¹ The demand for this type of secretarial service seems to be increasing and the work developing. As the field of preventive and research medicine is extended, with it will undoubtedly come a growing demand for the properly equipped woman as assistant. In addition to the office helper who receives patients, makes engagements, answers the telephone, and keeps accounts and records of patients, is found the secretary who, besides being a stenographer, aids in editorial work of medical publications, has charge of or assists in laboratory analyses, makes tests, and helps, under direction, in minor operations.

A knowledge of German is almost essential for an efficient secretary to a medical man, while French and Latin have proved most helpful. An elementary knowledge of the sciences, biology, chemistry, physiology, and bacteriology, would assist materially in analytic work, though, until this service can be adequately remunerated, a girl would not be justified in devoting additional time to such subjects, if not included in her regular curriculum, and in thus making the larger investment in her preparation.

The average salaries are low, \$10 and \$12 per week being the usual rate, \$15 less frequent, and \$18 and \$20 quite exceptional. Secretaries of this type receiving \$25 per week are rarely found.

To a girl or woman interested in laboratory work or the medical profession this field offers many attractions. Through this channel it would seem natural that the girl looking toward social work

¹ Based on records of 37 secretaries to physicians, interviews with 10 secretaries, and correspondence and questionnaires.

would become interested in medical social service and take up further training in preparation for such positions. The girl with sufficient training in laboratory methods may enter other laboratory work; and the student type of girl may specialize in research study or medical investigations. At present the field is not large nor the demand great, the \$8 and \$10 office assistant in many cases meeting the requirements.

*Secretaries in Law Firms.*¹ The duties of a secretary in a law firm may include, in addition to stenography and typewriting, which must be of the highest and most intelligent grade, all kinds of systematic filing, clerical office work, accounting, private correspondence, library work, court reporting, and executive supervision of a staff of clerical assistants and office routine. As legal work deals with an immense variety of matter, a stenographer may expect dictation involving, one day, an architect's terminology; another, medical terms; another, engineering or mechanical phraseology. A knowledge of Latin is most helpful in legal work, as many Latin phrases are constantly used. An elementary knowledge of law should assist a girl in becoming familiar with legal phraseology, though several lawyers, when asked if their secretaries would be more valuable to them with a knowledge of law, replied, "I have the law; what I want is a good stenographer."

The salaries naturally vary with the size of the firm, its standing, and the complexity of work. They may be divided into three general groups: one in which the first or initial salaries range from \$8 to \$12 per week; another, and the largest group, from \$12 to \$18, most usually found after at least 3 years' experience; and the higher salaries, \$20, \$25, and \$30, forming a group in which the positions have been created and developed by the secretary through years of experience and her increasing value to the firm.

Of a group of 63 secretaries in legal firms, whose experience varied from 1 to 28 years (shown by the Appointment Bureau records), 40, or 63 per cent., reported salaries of from \$15 to and including \$25 per week, only 5 salaries, however, being \$20 and over. In one firm visited, where 18 secretaries are employed, the minimum salary is \$15 and advancement over \$18 is rare. In another firm, where 8 secretaries are employed, the minimum

¹ Based on 75 records, 18 interviews, and questionnaires and correspondence.

salary is \$8, the maximum \$22, the highest received after 5 years experience in that firm. In still another firm, employing 7 secretaries, \$15 is the minimum salary, the maximum \$30, paid to 2 women who are private secretaries to officials of the firm.

Experience in a law office is an excellent training, giving a broad, general knowledge of business affairs, increasing the vocabulary, perfecting stenography, and stimulating efficiency. The hours are long, often over-time, the work constant and confining, but the environments are usually pleasant. As a result of experience as a secretary in a law office, we find some women taking up the study of law, others becoming efficient executive or private secretaries, others opening independent offices as public stenographers, doing court reporting and private work, and finally others developing into the official court reporter. The latter may be considered as distinctly belonging to this field.

*Official Court Reporters.*¹ There are 28 official court reporters in Massachusetts, 13 being women. Their salaries range from \$1,500 to \$2,500 per year for taking notes, with 10 cents extra per 100 words for transcribing notes. Reporters on salary thus increase their earnings materially, some receiving as high as \$8,000 and \$3,500 a year. Only counties of 200,000 inhabitants have official reporters on salary, those not on salary receiving \$9 and \$10 per day for taking notes, with the same extra stipend (10 cents per 100 words) for transcribed copy. Non-official court reporters, or public stenographers, receive 25 cents per 100 words for note-taking and typewritten copy. This work requires the highest type of accurate, intelligent stenography, with ability to take notes—when pressed—at a speed of 175 words a minute. Such rate, however, would be kept up but a few moments, and would occur in the course of court testimony, which is not continuous, but broken by questions and answers. (In this case “questions” and “answers” are counted.) The work also requires an intimate knowledge of legal terms and forms, as well as an extensive vocabulary. Court work is difficult. It requires maturity, great endurance, steady nerves, a power of concentration, and quick perception.

¹ Based on interviews with 4 official court reporters, correspondence with 4 others, and the *Revised Laws of Massachusetts*, 1902, vol. ii, chap. 165, secs. 80-88.

The examinations for the position of official court reporter are held at no stated time, but whenever a vacancy must be filled. Application must be made to the judges of the Superior Court. The examination is given by a committee of official reporters, and consists of a speed and accuracy test in taking notes from dictation, the speed ranging from 150 to 220 words per minute, the higher speed being on testimony. The best training schools are legal offices and the offices of public stenographers, where a practical experience in court reporting and a legal vocabulary may be gained.

As a specialized field of secretarial service, the legal work has marked advantages. It gives an excellent training and experience, it demands the highest grade of technical work, and, while the large proportion of salaries range from \$12 to \$18 per week, opportunities do exist, and may be created for more highly paid secretaries.

*Secretaries in Educational Institutions.*¹ In this group are included private-school secretaries, secretaries in college offices or departments, private secretaries for professors within the college, and secretaries in other educational organizations. It is for this class that the woman with advanced training, combined with a knowledge of stenography, is in demand. The following comments were made by employers regarding the specific advantage of a college course for secretaries in such positions:—

From college professors: "She understands our line of work."

"For scientific dictation a college training is most essential."

"For a college position it is nearly essential to have a girl with a knowledge of college matters,—a larger vocabulary and literary insight."

From college presidents: "College has given her a breadth of intelligence and a better use of her powers."

"Her college training developed her ability to correct manuscript and look up references."

"College gave her a background for her special work as an educational secretary."

Likewise, the woman with an advanced or college training is attracted to educational positions. She is familiar with the

¹ Based on 123 records, correspondence, questionnaires, and orders received by the Appointment Bureau for secretaries of this type.

college machinery, she likes the college atmosphere and student life, and by returning to this environment puts off or avoids entering the commercial or business world. The duties in such work are most varied,—correspondence, copying of manuscript, reference and research work, detailed cataloguing, record keeping, preparation of bulletins, conference with students, registration of students, accounting, and office supervision, with enough more to make each day's work one of immense variety. In private secretarial work for professional men a knowledge of French and German is valuable. For the college office or departmental secretary a knowledge of cataloguing, filing systems, and statistical methods, is essential, while familiarity with methods of preparing matter for publication, proof-reading, and printing, proves a valuable asset.

These positions pay initial salaries ranging from as low as \$8 per week to \$19 per week, \$12 and \$13 being most common. With 2 or 3 years' experience, salaries ranging from \$15 to \$18 may be expected, increasing to \$19, \$20, and over, according to the size and elasticity of the position. The whole range of initial salaries in these positions appears to be higher than in the other types discussed. Of a group of 70 women entering secretarial positions in educational institutions, 60 per cent. began at \$12 per week and over, 51 per cent. began at \$13, \$14, and \$15, and 8 per cent. at \$16, \$17, \$18, and \$19. At the same time in some instances women satisfied with small salaries in these positions, who count the congeniality of the work and the environments as partial compensation, may be found.

Among the advantages of this type of secretarial work may be mentioned the variety of duties, congenial surroundings, and contact with student life and academic interests. In some institutions a month's vacation with salary is given the secretary, while in others only 2 weeks with salary, with the privilege of longer time not on salary. On the other hand, college or school secretaries do not gain that broader knowledge of business affairs acquired only by business experience, and miss the stimulus of working among men interested in large commercial and industrial affairs. Also, if situated in a small college town, the woman of ambition feels a narrowing restraint.

With experience gained in such an office, a woman should be well equipped to work toward such positions as recorder, registrar, administrative secretary of an office or department, or appointment clerk, with occasional openings into other lines of work which come through contact with larger institutions.

*Secretaries in Social Organizations.*¹ In social organizations the secretary may be both clerical assistant and social worker, securing her position through stenography, but using it as a tool for development along her chosen line. A woman familiar with methods of investigation, tabulation, and statistical reports, in addition to her stenography, would prove valuable as a secretary in an organization doing social research.

It is impossible to state the salary to be expected, the scope and character of the work varying so materially, from that in which interest in social work serves as part compensation to that in which the executive management of an organization which requires large experience and offers a commensurate reward. In this line of service, stenography may be considered merely a wedge or tool, though it must be a sharp tool, to open the way into social work. We find such combinations as stenographer and field investigator, office assistant in a settlement house and district visitor, receiving salaries ranging upwards from \$10 per week and home. Beyond this are found the \$1,200 and \$1,500 salaries paid to general secretaries. The latter are heads of settlements, organizers of investigation work, house supervisors, and executive managers. Stenography may have been a tool by which these higher-paid positions were attained, but usually, however, it is the trained social worker and experienced woman who has reached the position of responsibility. If highly paid social positions may be attained through stenographic channels, may this not be a new field for which to strive?

*Private Secretaries.*¹ The term "private secretary" is elastic, but descriptive, carrying with it a certain rose-colored picture of an ideal position. The personal, social, or public duties forming a day's work will vary, depending entirely upon the occupation, special interests, or hobby of the employer. The private secre-

¹ Based on correspondence, records, and a few orders for secretaries received by the Appointment Bureau.

tary is both well paid and poorly paid, a notable contrast being seen in one who began with no experience at \$1,200 per year and another who, after 34 years of service, received \$624 a year. If the secretary must use her executive power, combined with private or personal duties, she is well paid.

*Executive Secretaries.*¹ Personality and individual qualities enter so largely into the position of executive secretary that it is impossible definitely to classify it as a type. As noted in the discussion of other types of secretaries, the most highly paid positions in each class are those requiring executive and administrative ability. Such positions are found in social, civic, charitable, and philanthropic organizations and institutions and commercial and business firms or enterprises. They call for managing ability, power of organization, co-operation, development, and administration,—qualities either inborn in a woman or cultivated only by experience in working with and directing others. Actual experience in the routine and development of office work is most valuable for the woman looking toward directing or supervising an office force. Tact in dealing with people, sympathy and understanding, keen insight for the future, precision, and good judgment are qualities making for an efficient executive secretary.

The executive secretary's duties will naturally vary with the general scope and purpose of the organization where she is employed. She may have direction of a force of 20 or more assistants, or she may be the sole administrator of a society. Ability to speak in public, to direct meetings, to present reports, and inspire enthusiasm and interest, all come within her field. For such service, or perhaps better for such personal qualities, the limits of remuneration are ill-defined, the yearly salaries being \$1,200, \$1,500, or \$2,000.

While the position of executive secretary is the goal toward which the secretary strives, it is one for which only the exceptional woman is qualified. Previous experience, advanced liberal education, and thorough training are of course valuable assets, but personality, and the possession of qualities previously mentioned, are the vital forces.

¹ Based on a few records in the Appointment Bureau and on correspondence and interviews.

DISCUSSION OF SALARIES.

Brief statements of salaries for each type of secretarial work have already been given, the purpose being to show the general range of salaries, the usual, and the approximate maximum to be expected under each of these main classifications. In the following discussion the types or classes are not specifically considered, but salaries are grouped together and presented as a whole, based on the usual salary found after varying numbers of years' experience.¹

From 1,100 records in the Appointment Bureau, reports of 727 salaries could be accurately used, and 297 more were taken from the records of Simmons College, making a total of 1,024 salaries upon which the following discussion is based. Of this number, 375 were salaries of women with college training. Of the other 649, only a very few had had no high school education, the majority being high school graduates. As stated before, in this study of salaries \$10 has been made the minimum, eliminating from the 1,500 or more Appointment Bureau records of so-called stenographers and secretaries about 400 that would be dealt with in a study of the stenographers receiving less than \$10 per week. It is believed that this selection eliminates that large group of workers who have had very small and unsatisfactory preparation, and thus affords a better group for comparison with the college-trained woman.

The most usual salary found occurring during the *first* year was \$12 per week for the college-trained girl, \$10 per week for the girl without college training. (For convenience we shall let C represent those who have had a college education and D those who have not had advanced training.) After *two* years' experience the most usual salary found for C was \$15, for D \$11; after *three* years' experience the salary for C remains \$15, that for D rises to \$12; after *four* years the salary of C rises to \$17, that for D remains \$12; and after *five* years the most usual salary for C remains \$17, that for D rising to \$15. (See Chart 1.) The number of salaries recorded for C with more than 5 years' ex-

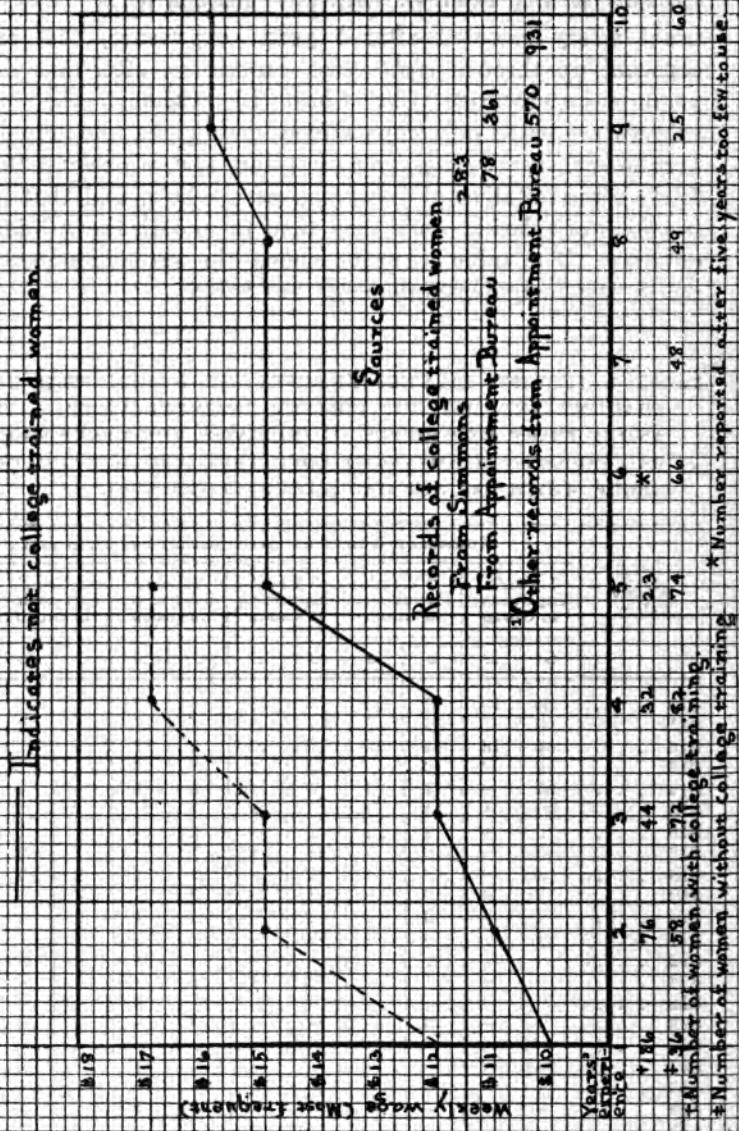
¹ The "most usual" salary was determined by finding the statistical "mode" for each group. The "mode" and the "median" were approximately the same in each case. King, *Elements of Statistical Method*, Chap. XII.

perience is too small to base any average upon. For D the usual salary received after 5 years' experience, \$15, remains constant up through *eight* years' experience, after *nine* and *ten* years rising to \$16. (See Chart 1.) Although the "usual" salaries are based on comparatively few figures, the actual numbers in each case being given on Chart 1, it is believed they are fairly representative of the group as a whole, and that greater numbers of salaries would only tend to smooth the regularity of advance. The table following shows the actual numbers upon which the foregoing statements are based.

TABLE 1. SHOWING SALARIES RECEIVED BY WOMEN WITH COLLEGE TRAINING AND WITHOUT COLLEGE TRAINING AFTER 1, 2, 3, 4, AND 5 YEARS' EXPERIENCE. C INDICATES THE GROUP WHICH HAS HAD COLLEGE OR ADVANCED EDUCATION, AND D INDICATES THE GROUP WHICH HAS NOT HAD ADVANCED TRAINING.

Weekly Salary	NUMBER OF WOMEN RECEIVING SALARY SPECIFIED AFTER										Totals	
	1 Year's Experience, in Group		2 Years' Experience, in Group		3 Years' Experience, in Group		4 Years' Experience, in Group		5 Years' Experience, in Group			
	C	D	C	D	C	D	C	D	C	D		
\$10 . . .	34	19	7	25	2	17	2	11	—	7	124	
\$11 . . .	27	1	1	5	2	8	—	2	1	1	48	
\$12 . . .	40	13	11	15	3	29	2	29	1	17	160	
\$13 . . .	19	2	3	—	3	2	3	8	1	5	46	
\$14 . . .	32	—	7	4	5	3	3	6	—	9	69	
\$15 . . .	18	1	14	7	8	8	1	14	3	17	91	
\$16 . . .	5	—	4	1	6	—	2	2	2	8	30	
\$17 . . .	5	—	6	—	4	3	5	1	3	1	28	
\$18 . . .	2	—	7	—	4	—	2	4	2	7	28	
\$19 . . .	2	—	8	—	1	—	2	—	—	—	13	
\$20 . . .	1	—	3	1	2	—	5	4	3	1	20	
\$21 . . .	1	—	—	—	2	—	—	—	2	—	5	
\$22 . . .	—	—	1	—	—	—	—	—	—	—	1	
\$23 . . .	—	—	1	—	2	1	2	—	2	—	8	
\$24 . . .	—	—	—	—	—	—	—	—	—	—	0	
\$25 . . .	—	—	3	—	—	1	3	—	2	—	9	
\$26 . . .	—	—	—	—	—	—	—	—	—	—	0	
\$27 . . .	—	—	—	—	—	—	—	1	—	—	1	
\$28 . . .	—	—	—	—	—	—	—	—	—	—	0	
\$29 . . .	—	—	—	—	—	—	—	—	1	—	1	
\$30 . . .	—	—	—	—	—	—	—	—	1	—	1	
Totals . .	186	36	76	58	44	72	32	82	23	74	683	

Chart I, showing usual wage of stenographers and secretaries
after 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 years' experience.
— - - - - Indicates non college-trained women



¹Omitting all who received under \$10.

Number of women with college training. * Number reported after five years, too few to use.
* Number of women without college training.

The following table shows actual salaries and numbers receiving the respective salaries after 6 and up to 18 years' experience, based on the records of women who have not had a college or advanced education:—

TABLE 2, SHOWING SALARIES RECEIVED BY WOMEN WITHOUT COLLEGE TRAINING AFTER 6 AND UP TO 18 YEARS' EXPERIENCE.

Weekly Salary	NUMBER OF WOMEN RECEIVING SPECIFIED SALARIES AFTER SPECIFIED YEARS' EXPERIENCE													Totals
	6 Years	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years	
\$10 . .	7	2	2	1	—	—	—	—	—	—	—	—	—	12
\$11 . .	2	—	—	—	—	—	—	—	—	1	—	—	—	3
\$12 . .	18	12	9	2	7	1	3	—	1	—	—	—	1	54
\$13 . .	3	4	2	1	6	—	2	—	—	—	—	—	—	18
\$14 . .	9	2	7	1	6	—	—	2	—	2	—	—	—	29
\$15 . .	16	16	10	4	12	3	4	2	3	2	1	—	1	74
\$16 . .	1	2	4	3	—	1	1	1	1	—	1	—	1	16
\$17 . .	1	2	—	1	3	1	1	—	2	1	—	—	—	12
\$18 . .	7	3	8	5	9	3	4	2	1	3	—	1	—	46
\$19 . .	—	—	—	—	—	—	—	—	—	—	—	—	—	0
\$20 . .	2	3	3	3	5	1	4	—	1	2	2	—	—	26
\$21 . .	—	—	1	1	1	—	—	—	—	—	—	1	—	4
\$22 . .	—	1	—	—	2	—	—	—	1	—	—	—	—	4
\$23 . .	—	—	—	1	1	—	—	—	—	—	—	—	—	2
\$24 . .	—	—	—	—	—	—	—	—	—	—	—	—	—	0
\$25 . .	—	1	3	2	5	—	1	—	—	—	—	1	1	14
\$26 . .	—	—	—	—	—	—	—	—	—	—	—	—	—	0
\$27 . .	—	—	—	—	2	—	—	—	—	—	—	—	—	2
\$40 . .	—	—	—	—	1	—	—	—	—	—	—	—	—	1
\$46 . .	—	—	—	—	—	—	—	—	—	—	—	1	—	1
\$58 . .	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Totals	66	48	49	25	60	10	20	7	10	11	4	5	4	319

The large proportion of salaries continues to group about the \$15 point, with scattering salaries of \$20, \$22, and \$25 per week. The three highest salaries reported, \$40, \$46, and \$58 per week, were in executive positions. Speaking in general terms of the few salaries reported after 5 years' experience, for women who have had college training, \$18 per week salaries predominate, \$20 and \$25 being not uncommon.

Treating the salaries of C and D in another manner, after 3 years' experience we find the largest per cent. of college-trained women (30 per cent.) receiving from \$14 to \$16 per week, while of those without the higher training the largest per cent.

(43 per cent.) receive from \$12 to \$14. After this same period, 3 years, 11 per cent. of C receive from \$18 to \$20, while none of D receive this amount. After 5 years' experience we find the largest per cent. of C (22 per cent.) receiving from \$16 to \$18, and the same per cent. receiving from \$20 to \$22, while the greatest per cent. of D (35 per cent.) receives from \$14 to \$16. (See Chart 2.)

Again, dealing with this group of salaries by quarters, we find in each case the college-trained woman's salary ranging higher than that of the woman without advanced training. Table 3 expresses this grouping more in detail:—

TABLE 3, SHOWING SALARIES RECEIVED BY 361 WOMEN WITH COLLEGE TRAINING AND 322 WOMEN WITHOUT COLLEGE TRAINING, SHOWN BY QUARTERS. C INDICATES THE GROUP WHICH HAS HAD COLLEGE OR ADVANCED EDUCATION, AND D INDICATES THE GROUP WHICH HAS NOT HAD ADVANCED TRAINING.

	WEEKLY SALARIES RECEIVED AFTER									
	1 Year's Experience in Group		2 Years' Experience in Group		3 Years' Experience in Group		4 Years' Experience in Group		5 Years' Experience in Group	
	C	D	C	D	C	D	C	D	C	D
First quarter	\$10-\$11	\$10	\$10-\$12	\$10	\$10-\$14	\$10-\$11	\$10-\$14	\$10-\$12	\$11-\$15	\$10-\$12
Second quarter	\$11-\$12	\$10	\$12-\$15	\$10-\$11	\$14-\$15	\$11-\$12	\$14-\$17	\$12	\$15-\$18	\$12-\$14
Third quarter	\$12-\$14	\$10-\$12	\$15-\$18	\$11-\$12	\$15-\$18	\$12-\$13	\$17-\$20	\$12-\$15	\$18-\$21	\$14-\$15
Fourth quarter	\$14-\$21	\$12-\$15	\$19-\$25	\$12-\$20	\$18-\$23	\$13-\$25	\$20-\$25	\$15-\$27	\$21-\$29	\$15-\$30

From this group of about a thousand salaries, which we believe are fairly representative, it is apparent that the college-trained woman in secretarial service begins at a uniformly higher salary and advances more rapidly than the woman without such training. Although the woman with advanced education may not necessarily be able to use her tools, stenography and typewriting, as skilfully as the girl who has taken up her technical training younger, the fact that she is more mature in years at the time she enters upon her vocation and is better equipped with a broad fundamental education has proved that she is more able to do constructive, individual, systematic, and conscientious work.

Chart III, showing comparison of salaries received by secretaries with college training and without college training after three and five years' experience.

Key.

without college training -
3 years' experience.
with college training -
3 years' experience.
without college training -
5 years' experience.
with college training -
5 years' experience.

16

14

12

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8

6

4

2

0

10

8</

COLLEGE-TRAINED SECRETARIES.

Preparation. Turning now to the girl who has had the advantage of a college education, it may be of value to the prospective secretary to know what college courses, in the opinion of other secretaries, are most pertinent for the work they are to enter. The following question was asked thirty-three college graduates,— “What subjects studied in your college course bore directly upon your secretarial work?” Following is a grouping of replies, given by combinations and listed under Economics, Science, History, and Sociology:—

Subjects approved. ¹	Number approving each subject or group.
Economics	4
Economics and History	3
Economics, History, and Sociology	1
Economics and Sociology	5
Economics and Library Studies	1
Economics, Library Studies, and History	1
Economics and Science	1
Total	<u>16</u>
Science	2
Science and Library Studies	1
Science and Mathematics	1
Science and Economics	1
Total	<u>5</u>
History	4
History and Mathematics	1
History and Economics	3
History, Economics, and Sociology	1
History, Economics, and Library Studies	1
Total	<u>10</u>
Sociology	5
Sociology and History	1
Sociology, History, and Economics	1
Sociology and Economics	5
Total	<u>12</u>

¹ Duplications will be found under the various combinations of subjects.

This enumeration would appear to indicate that, based on the opinion of this group of college-trained secretaries, the study of economics, history, or sociology alone, or a combination of economics with history or sociology, is the most valuable preparation for secretarial service.

To the question asked of 89 college-trained secretaries, "What foreign languages do you speak?" the enumeration of replies was as follows:—

French and German	47
French	19
French and Spanish	2
French and Italian	3
French, German, and Italian	3
French, German, and Spanish	8
French, German, Spanish, and Italian	2
German	4
German and Italian	1
 Total	 89

The large number reporting French and German is undoubtedly due to the prevailing opportunity for the study of these languages in the secondary schools and in the colleges. However, experience convinces us that French and German are the languages most usually called for in secretarial work.

Owing to the diversity of types of work for the secretary and a corresponding variety of duties within each type, it is hard to make more definite suggestions concerning preparation in college for this vocation than are given in the previous discussions of classes of secretarial work. The individual tastes of the college girl, her special interests and outlook, and her personal characteristics must guide her in considering for which phase of secretarial work she is best fitted and for which she will prepare.

A Study of the Salaries of Secretaries trained in Simmons College. The records of 371 secretaries who had been trained in the Secretarial Department of Simmons College proved a valuable source of information for types of initial positions, salaries, and

successive progressions. This number includes those who completed the prescribed four-year secretarial course, or a part of this course, and the one-year course open to college graduates. Seventy-five of this number were graduates of other colleges, who took the one-year secretarial work, the representation of colleges being as follows:—

Smith College	18	Ohio Wesleyan College	1
Boston University	10	Colby College	1
Radcliffe College	9	Acadia College	1
Vassar College	8	Cornell University	1
Mount Holyoke College	8	University of Oregon	1
Wellesley College	7	Bates College	1
Tufts College	5	Wooster College	1
Oberlin College	1	St. Lawrence College	1
Bryn Mawr College	1		

It was difficult to classify the respective secretarial positions of these Simmons students by types and salaries, as the yearly data received from graduates are not uniformly full, nor are salaries given in such form that progressions from year to year can always be accurately determined. However, the classifications that follow are felt to be fairly representative. Of these 371 records, 236 indicated the initial positions, and these were classified as follows:—

- 95 were secretaries in educational institutions.¹
- 32 were teachers of commercial subjects.
- 16 were private secretaries.
- 12 were secretaries in social organizations.
- 11 were secretaries for physicians.
- 7 were secretaries in law firms.

The remaining 63 initial positions listed were mainly stenographic positions in business and commercial offices.

¹ Including secretaries in college offices, college departments, private secretaries for professors, and secretaries in schools of all kinds.

Of the 95 whose initial positions were in educational institutions, 71 recorded the first yearly salaries, as follows:—

2 received .	\$400	1 received .	\$150	5 received .	\$780
2 received .	\$500	6 received .	\$660	1 received .	\$800
3 received .	\$520	1 received .	\$675	1 received .	\$832
2 received .	\$550	1 received .	\$700	1 received .	\$840
1 received .	\$572	5 received .	\$720	2 received .	\$900
12 received .	\$600	7 received .	\$728	1 received .	\$950
6 received .	\$624	10 received .	\$750	1 received .	\$1,000

The educational secretary receives a usual (modal) initial salary of \$660 per year, while 30 per cent. of this group began at a salary of \$750 or more.¹ Of this group, 23 were graduates of other colleges and had taken the one-year Simmons course, their initial salaries being as follows:—

1 received .	\$400	1 received .	\$624	4 received .	\$750
1 received .	\$520	3 received .	\$660	1 received .	\$780
1 received .	\$550	3 received .	\$720	1 received .	\$832
4 received .	\$600	2 received .	\$728	1 received .	\$900

Based on this small number, the usual or modal initial salary falls between \$660 and \$720 per year.

Of the 32 teachers of commercial subjects, 28 gave their initial salaries as follows: ²—

2 received .	\$400	3 received .	\$550	2 received .	\$750
1 received .	\$468	7 received .	\$600	2 received .	\$800
1 received .	\$475	1 received .	\$650	1 received .	\$850
4 received .	\$500	4 received .	\$700		

Of this number, 8 were graduates of other colleges:—

2 receiving .	\$500	2 receiving .	\$700	1 receiving .	\$800
1 receiving .	\$650	1 receiving .	\$750	1 receiving .	\$850

For this class the most usual salary appears to be \$600.

¹ "Modal" salary, the most usual or most common. King, *Elements of Statistical Method*, Chap. XII.

² It should be noted that teachers of commercial subjects usually work 40 weeks in the year and some doubtless supplement their earnings by additional summer stenographic work. This might raise the average salary a slight degree.

Of the 16 private secretaries, 10 gave initial salaries as follows:—

3 received .	\$600	3 received .	\$780	1 received .	\$1,000
1 received .	\$720	1 received .	\$900	1 received .	\$1,200

Only 2 of this number were graduates of other colleges, one receiving \$720 and one \$780.

Grouping together all the initial salaries given, a total of 167, three groups of which are not included in the above detailed presentation, and 47 of which are salaries of college graduates, we find the salary of most usual occurrence of the 120 who had taken the four-year course to be \$624 per year, or \$12 per week, while that of the 47 college graduates is \$660, or \$12.70 per week. Greater regularity of figures would probably bring these salaries parallel. Chart III gives a picture of these initial salaries. The similarity of the general rise and fall of the two outlines is marked. The highest point of the dotted line indicates that 38 per cent. of the total number of college graduates (47) begin at an initial salary of from \$700 to \$800, while, as shown by the black point between \$700 and \$800, only 26 per cent. of the 120 taking the longer course begin within this group. Fuller and more complete data would doubtless tend to lessen these differences.

The following table on page 140 shows salaries as far as it was possible to group them after 2, 3, 4, and 5 years' experience.

While these numbers are too few upon which to base any reliable averages, they give an idea of the height to which individuals of this Simmons group rise in a period of 5 years after completing their training in the Secretarial Department. In each case, it should be noted, the highest salaries listed are received by the four-year secretarial students; *e.g.*, \$1,200 as an initial salary, \$1,300 after 2 years' experience, \$1,200 after 3 years' experience, and \$1,500 after 5 years. It may be of interest to present a few notable individual progressions of secretaries who have done exceptionally well in a short period.

One, who began as secretary in a college at \$700 per year, after 4 years received \$1,300 as private or executive secretary.

Another, who began as secretary in a social organization at \$624, in 2 years received \$923, the next year \$1,000 as secre-

Chart III, showing initial salaries of 167 secretaries who received their training at Simmons College

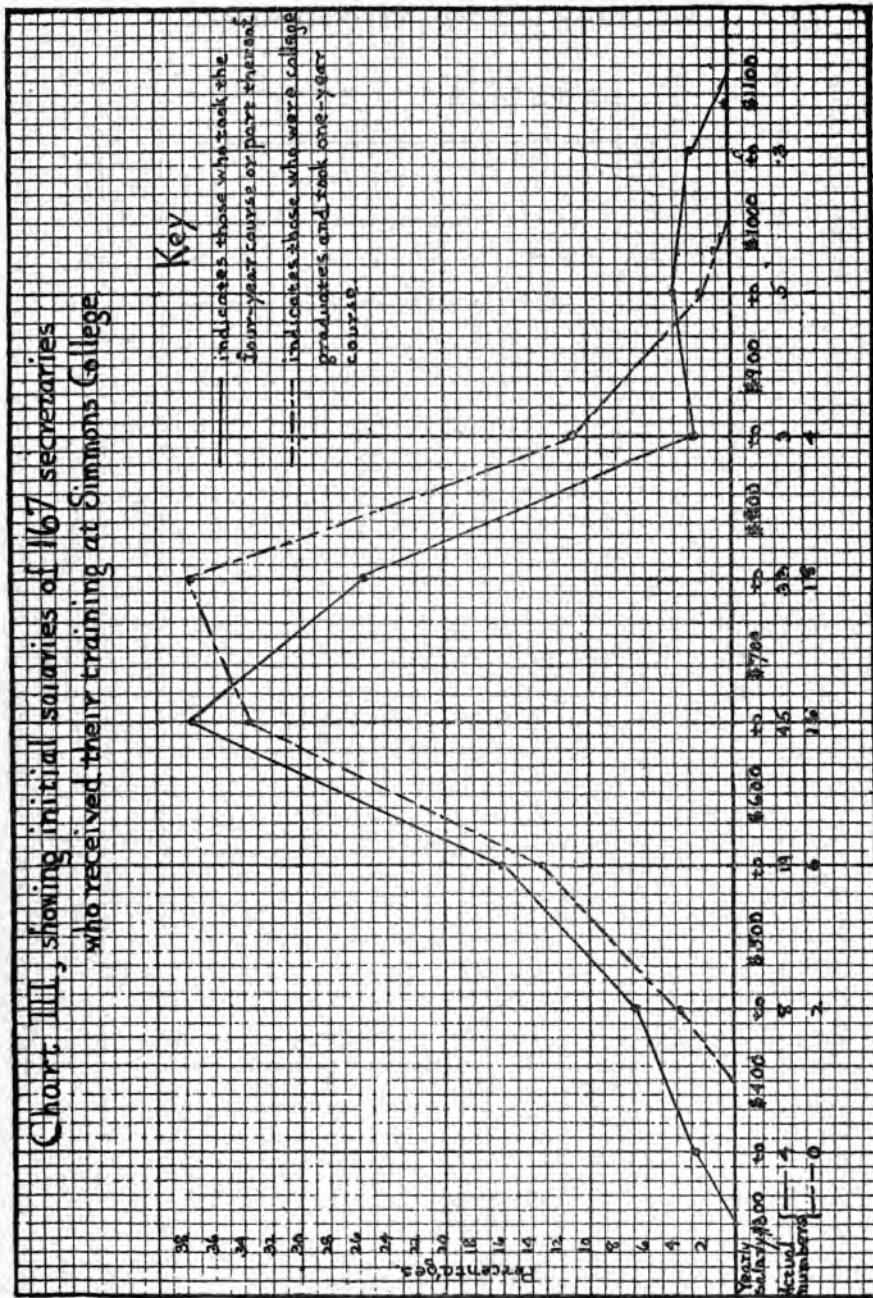


TABLE 4. SHOWING YEARLY SALARIES OF SECRETARIES WHO RECEIVED THEIR TRAINING AT SIMMONS COLLEGE—
BY YEARS OF EXPERIENCE AND LENGTH OF COURSE.¹

Yearly Salaries	NUMBER RECEIVING SPECIFIED SALARIES									
	Initial Salary		After 2 Years' Experience		After 3 Years' Experience		After 4 Years' Experience		After 5 Years' Experience	
	4 Year Course	1 Year Course	4 Year Course	1 Year Course	4 Year Course	1 Year Course	4 Year Course	1 Year Course	4 Year Course	1 Year Course
\$500 and under \$600	19	6	5	—	—	1	—	—	—	—
\$600 and under \$700	45	16	5	—	3	1	2	—	2	—
\$700 and under \$800	33	18	15	1	10	—	4	1	1	—
\$800 and under \$900	3	4	5	2	5	1	2	1	—	—
\$900 and under \$1,000	5	1	11	1	3	3	6	—	4	—
\$1,000 and under \$1,020	2	—	6	2	—	—	2	—	—	12
\$1,020 and under \$1,040	—	—	1	—	1	—	—	—	—	2
\$1,040 and under \$1,060	—	—	—	1	—	—	—	—	—	4
\$1,060 and under \$1,100	—	—	1	—	—	—	—	—	—	1
\$1,100 and under \$1,116	—	—	—	—	2	—	—	—	—	2
\$1,116 and under \$1,160	—	—	—	—	—	—	—	—	2	—
\$1,160 and under \$1,196	—	—	—	1	—	—	—	—	—	1
\$1,196 and under \$1,200	—	—	—	—	—	—	1	—	—	1
\$1,200 and under \$1,300	1	—	—	1	—	—	1	—	2	7
\$1,300 and under \$1,500	—	—	—	3	—	—	—	—	1	5
\$1,500	—	—	—	—	—	—	—	—	—	1
Totals	108	45	52	9	26	5	24	2	12	0
										283

¹ Number reported with 6 years' experience or over too few to use.

² Course for college graduates.

tary and treasurer of a manufacturing concern, the next year \$1,200.

Another, who began as secretary to the president of a college at \$750, in 2 years received \$1,000, in 3 years \$1,100.

Another, who began as assistant registrar at \$675, after 2 years received \$1,000 as secretary in a law office, and in the fifth year from graduation received \$1,500 as private and executive secretary.

Still another began as secretary in a firm at \$900, and after 8 years in the same concern received \$1,420.

In spite of the limited amount of data taken from the Simmons College records, these figures, tables, and charts show a uniform initial salary above the average, and, as far as was discernible, fairly regular advances from year to year, varied by some few exceptionally rapid advancements and unusually good salaries. On the whole, it may be said of this group that the best records reported are of those who have completed the full four-year Simmons secretarial course. This fact, if substantiated by fuller records of progressions and advancements, would indicate that the longer and more thorough grounding in stenography, typewriting, business methods, accounting, and cataloguing, allied with courses given in economics, history, languages, etc., as prescribed in the four-year secretarial curriculum, is more effective in results than the special one-year course taken by graduates of other colleges.

GENERAL CONCLUSIONS.

Before drawing conclusions regarding the field of secretarial service, let us emphasize particularly the personal element, so often the determining factor on the line dividing the position of the stenographer from that of the secretary. It is important that the girl looking ahead to executive secretarial work should know what personal qualities make for advancement, development, and success.

Possibly the most frequent comment of praise on the part of employers is, "She has common sense." In truth, this epitomizes the following desirable qualities, seemingly different: thorough-

ness, enthusiasm, tact, effacement of personal feeling, devotion to the interests of the employer, imagination, ability to meet people easily and pleasantly, an appreciation of the value of time, cheerfulness, a sense of humor, and, first and last, accuracy in matters small or great.

As a vocation in itself, secretarial work may be said to have marked limitations, but as an apprenticeship or training school it is unrestricted in opportunity. The secretarial field is not overcrowded with competent women; it is a growing field, and one of immense variety. We combine here the opinions of various secretaries regarding the advantages and disadvantages of their work. It is a dignified work, not so physically or nervously tiring as teaching. It is work which at the end of the day may be left at the office. It gives an excellent self-training and a practical knowledge of the working side of life. It is a tool with which the way may be opened into many fields of broader work. It offers opportunity for working with and for educated people and affords mental stimulus. Its limitations, however, are apparent. Promotion too often depends upon the employer's individual estimate of the secretary's value to him. Change from one secretarial position to another often means financial sacrifice, as quickness and skill do not make the secretary, and, no matter how technically efficient a secretary may be, her commercial value depends largely upon her intimate familiarity with the details of her employer's occupation. And, finally, in a large proportion of stenographic positions the duties are essentially routinary and mechanical, offering little opportunity for individual or initiative work.

With the development and increasing use of mechanical office appliances, phonographs, dictaphones, adding machines, and stenotypes, which can well be handled by intelligent girls who are, however, not equipped for secretaries, we may look for more specialized and higher duties for the secretary. A partial elimination of her present mechanical routine, giving her more opportunity for executive work, reference work, statistical work, and office development, will tend to broaden her field and at the same time demand of her a larger and more specialized training. In addition let the intelligent secretary be wide-awake to current

affairs, let her take a sincere interest in her employer's business and those affairs pertaining to the civic, social, and political life about her, let her feel and show a genuine pleasure and pride in her work, let her make her service a continuous education, realizing that technique is of no avail unless supported by a broad general knowledge. In this way she will render service in the secretarial field.

CHAPTER IV

OPPORTUNITIES FOR WOMEN IN THE BUSINESS OF REAL ESTATE

(BASED ON A STUDY IN BOSTON AND SUBURBS)

ELEANOR MARTIN

OPPORTUNITIES FOR WOMEN IN THE BUSINESS OF REAL ESTATE

(BASED ON A STUDY IN BOSTON AND SUBURBS)

INTRODUCTION.

Women have already become interested in the real estate business as a profession, and the following study has been made with a view to discovering the qualifications essential for success and the general conditions of the business which may make it a possible opening for women in the future. In order to secure this knowledge, it has been necessary to learn the experience of men now engaged in it, since until recently it has been exclusively the business of men. But the effort has also been made to learn from women real estate dealers the actual conditions as they have found them, as well as the outlook from the woman's point of view.

The statements given below are based upon information gathered from interviews with 75 real estate brokers of Boston, including 22 women brokers, or approximately all of the women now engaged in the business in this city, and 53 men who represent the most reliable Boston firms and whose opinions on the subject are therefore deserving of considerable weight.¹ In the absence of any available description and because of a failure to understand its professional importance, an outline of the situation and of the special features characteristic of the business in Boston seems essential as an introduction to the detailed study of returns from the interviews.

GENERAL SITUATION IN REAL ESTATE IN BOSTON.

Within recent years a decided change in real estate business has taken place, largely due to the difference in the type of men who have gone into the business. A member of one of the largest and

¹ In the Boston business directory for 1911, 1,163 names are registered as real estate brokers.

most successful firms in Boston has said that, when he began 40 years ago, he was the first man to take into his office young college men with a view to teaching them. Prior to this time, real estate men were, as a rule, elderly men, many of whom had failed in their chosen vocations,—“wrecks of fortune,” as they were referred to by 5 of the men interviewed. In fact, of the 11 men who spoke specially of the type of men in the business, all were agreed that until recent years an impression has prevailed that all one needed to become a real estate broker was an office, or even a desk. While it was somewhat difficult to learn just what conditions led to the choice of real estate as a vocation by the men interviewed, it seems probable that 7 worked their way up in the business, beginning as young boys. Nineteen represent the college type of men, very progressive and of keen business ability. Eighteen seem to belong to the older generation of able, reliable, and conservative men, who definitely chose real estate as a vocation, while possibly 9 of these men may represent the class who drifted into the business, but who proved that they had sufficient ability to make a success of it and to remain in it.

Just when the change came from the idea of “real estate” as a makeshift to that of “real estate” as a profession for which special ability and special training were necessary it is difficult to state. It is equally difficult to explain just what causes led to the change, but it is quite certain that, as population increased, as enlarged and better transportation facilities opened up, as new areas of land extended farther and farther from the heart of the city into the surrounding country and suburbs, the problem of finding a location adapted to the individual needs has become vastly more complicated and one demanding for its solution genius and an ability of a particular kind. Obviously, the ordinary individual has neither time nor knowledge sufficient to meet the question of where to locate, whether he desires a location for business purposes, for a home, or for investment. He must depend upon some individual who understands the social, political, and moral conditions of certain districts as well as the actual land values in those sections. Undoubtedly, this enlarged demand for definite and practical understanding has had much to do with improving the type of men who have entered the field as real estate brokers.

The great competition which has existed and still continues to exist in the business was emphasized by 27 brokers. They called attention to the 1,100 real estate brokers registered in the city directory, stating that many of these do some real estate business in connection with another occupation.

Real estate is probably the one line of business in which capital is not essential. Of the 53 men brokers, questioned, only 3 considered capital as essential, and then only as useful for buying real estate in a low market to hold for advance in price. Twenty-five men were very decided in thinking capital not an essential in the business. One man who has a very large office, with 25 to 30 men in his employ, said that he had always refused to employ sons of rich men, as he wanted men who were more likely to use energy in pushing sales in order to make large commissions than to look for opportunities for speculation. The man with capital, who buys for speculation, makes up only one class among real estate brokers, and rarely enters the field as a general broker.

Since real estate is the legitimate business of 1,100 people in Boston and of an indefinite number who make it a side issue, the competition fosters every form of dishonesty and attracts some undesirable men to the business. It is for this reason that the better class of brokers are urging the Federal Government to demand a license fee from real estate brokers,—a fee of from \$50 to \$500 or even \$2,000. So far custom alone regulates charges,—custom formulated somewhat definitely by the Real Estate Exchange, as is shown by the schedule of brokers' commissions on pages 150 and 151. Upon these details the courts have set their approval in any case brought for trial. In spite of the fact that there is much irregularity in the business, it would seem that no flagrant violations of the unwritten law have been found.

SPECIAL FEATURES OF REAL ESTATE BUSINESS CHARACTERISTIC OF BOSTON.

Much of the real estate business is carried on by general brokers who do all kinds of real estate business. The brokers buy and sell real estate either for themselves or on commission. The insurance for this property is also usually left in the hands of the

Real Estate Exchange

AND AUCTION BOARD

	INCORPORATED	BOSTON	1889	
	•	•	•	•

Schedule of Brokers' Commissions.

(In the absence of Special Agreement.)

SALE OR PURCHASE	Boston Proper—\$10,000 or less	2 1/2 per cent.
	Over \$10,000 and up to \$30,000, 2 1/2 per cent on \$10,000 and 1/4 of one per cent on each \$1000 and fraction thereof exceeding \$10,000;	
	\$30,000 or over	1 per cent.
	Suburbs *	2 1/2 per cent.
EXCHANGES	Elsewhere.	the customary local charges.
		Commissions, as above, paid by both parties.

MORTGAGES

Boston Proper—\$10,000 or less	2 per cent.
Over \$10,000 and up to \$30,000	2 per cent on
\$10,000 and 1/2 of one per cent on each \$1000	
and fraction thereof exceeding \$10,000;	
\$30,000 or over	1 per cent.

Suburbs *

Second Mortgages	2 per cent.

* SUBURBS include all districts of BOSTON outside BOSTON PROPER, and the following: Arlington, Belmont, Brookline, Cambridge, Chelsea, Dedham, Everett, Malden, Medford, Melrose, Milton, Newton, Quincy, Revere, Somerville, Waltham, Westtown, Winthrop. BOSTON AND ROXBURY LINES:—The southernly lines of estates abutting on the southerly side of Massachusetts Avenue from the Roxbury canal to the Providence Railroad location and of Ruggles street and the Fenway from said railroad location to Brookline avenue, thence across the Riverway to the centre line of St. Mary's street.

LEASES

Under three years, on amount of first year's rent	2 1/2 per cent.
Three years, or over, on gross amount of rent	1 per cent.

Taxes paid by lessees on leased premises shall be reckoned as a part of the rental on which commissions are chargeable by brokers negotiating leases. The amount of the taxes on the leased premises payable on November first prior to the consummation of the lease shall form the basis upon which such charges shall be reckoned.

EXTENSIONS OF LEASES.

For extensions of leases provided for in original instruments, if a rental of original lessees or their assigns, full leasing commissions to brokers negotiating such original instruments, payable upon effect of such extensions by such lessees; provided that the total commissions paid for original leases and extensions shall not exceed in amount a commission chargeable for the entire term covered by the original lease and its extensions.

RENEWALS OF LEASES.

To brokers negotiating original leases and employed for renewals, without increase of rental over that named in the original leases, one-half the regular leasing commissions payable upon such renewals; when rental is increased, full leasing commissions.

SALES UNDER OPTIONS.

To the broker negotiating a lease containing an option of sale, if option is availed of, full commissions for both lease and sale, but not to exceed in amount the commissions chargeable upon the total amount received by the owner from both sale and lease.

CARE AND MANAGEMENT of Estates, on amount collected	5 per cent.
MINIMUM CHARGE for Sale, Mortgage or Lease	Twenty-five Dollars.

Adopted by the Board of Directors, April 14, 1890,
Amended March 14, 1892, March 9, 1903, Oct. 8, 1905, March 20, 1907, March 14, 1910.

broker. After the broker is established and has become well known, he handles more or less trust property. This brings in a steady income, and is one of the phases of business which seems to be most desired. In addition he may secure and place loans and mortgages for his customers, which in some firms is an important part of the business, for it is said that borrowed money is used either as a construction loan or as a mortgage on the building itself in many of the apartment and dwelling-houses now being built. Indeed, some brokers make development of land an important part of their work; that is, buying the land and building upon it with their own money, if possible, or with borrowed capital, if necessary. The general broker is to a greater or less extent also the real estate agent who leases houses or apartments and who has general care of property, including charge of repairs, but the returns are much less in comparison with the time and labor expended. There were 16 general brokers among the offices visited. In 3 other offices a general business was done, with the emphasis laid upon rentals, while in another the mortgage side of the business was most prominent.

Some of the large offices and some of the small well-established firms do a special line of business. These offices naturally divide into the large conservative office, the large progressive office, and the small general broker or one-man office where one line of business only is emphasized. The large conservative office, represented by 8 of the firms visited, has a splendid office equipment, a well-established reputation, and devotes practically its entire attention to the care of trust property, buying and selling as necessary. To succeed, the firm must care for property valued at millions of dollars in order that the commission from the business may be profitable. In the large progressive business office, represented by 16 firms in Boston, the machinery is most elaborate and complicated, demanding a keen business man at its head and employing from 3 or 4 to 25 or 30 men, each in charge of a certain line of work or responsible for all the real estate business in a certain section or suburb. The men usually work on a commission basis in these large offices, and, if clever, are able to make large incomes, often ranging from \$5,000 up. In fact, one broker said that several of his men had grown rich

in the business. The small general broker usually specializes either in locality or kind of property. In a certain section he endeavors to cover all lines of real estate work, renting and caring for property, buying and selling property, and placing loans and mortgages. About 9 of these offices were found among those visited. Other offices look after a special kind of property, as, for example, 6 brokers interviewed deal with business offices in the down-town section of the city, and 2 attend to the buying and selling of manufacturing plants, studying conditions in various localities with a view to changing or establishing the location of such industries when necessary. Seashore property or country estates and farms, are lines in which 3 other brokers specialize. One man handles mainly the mortgage end of the business.

All kinds of combinations are made in various offices, and it is quite common to find co-operation between several different firms, each of which is specializing in some one line or in some one locality. The agreement is merely a division of commissions. The plan of co-operation, however, gives rise to another class of brokers known as "curbstone brokers," men who are said to "have their offices in their hats." These men have no offices, often not even desk room, but they hear of business through the large offices or possibly in corridors or by chance conversation on the street. They devote their energies to carrying through transactions learned of in this way, independently if possible, or if not, in connection with another office, and so secure the commission or at least a share of it. An instance of this was given by a broker who said that often one of these curbstone brokers would come to his office on some pretext which often necessitated his waiting in the main office a few minutes, and sometimes even an hour or more, hoping during this time to overhear something which he could work out into a commission for himself.

The outlook in Boston is not encouraging, due partly to the unique character of the situation, partly to the high cost of building materials, and partly to the high tax rate. In real estate, as in some other lines of business, the city is conservative, and business is not carried on with the rush and whirl of many western

cities. Real estate does not change hands easily nor frequently. Property values have remained almost the same for the last 10 or 12 years. On some streets and in some localities they have even decreased in value, as the residential section has been crowded farther up town by the movement of the commercial centre. Down-town large commercial buildings, which were put up with the belief that they would pay at least 4 per cent. on the investment, are, so it is said, paying only $2\frac{1}{2}$ per cent. While the papers report at times numerous sales, in the majority of cases it is claimed that property is exchanged rather than sold outright.

Brokers give various reasons for the unsatisfactory condition in Boston, but no one seems to feel entirely certain that he has solved the problem. Of the 61 dealers who referred to the general condition of the business in Boston, 6 said the outlook was good, 10 that it was fair, and 24 that it was very poor, while of the women 14 said business was good, 5 that it was fair, and only 2 referred to the outlook as poor. The reason for this difference of opinion between men and women in regard to the business outlook will be considered later. Here it is essential merely to discover why so many feel that real estate business in Boston promises so little. First, the failure of large commercial and manufacturing plants to locate in Boston is one reason assigned, due, it is said, to the desire of some of the most influential business men that the city should retain its conservatism rather than become progressive. Second, the general opinion among the brokers visited was that Boston's failure to make use of its harbors and water supply for large commercial and manufacturing interests tended to make real estate transactions slow and to offer little opportunity for investment of capital in this locality. Third, comparatively few of the real estate brokers, possibly some dozen of the old-established firms, do most of the business.

This "cut-and-dried" character of the business, in terms of real estate men, is undergoing a change in recent years. Heretofore a man who had real estate to sell or who wished to buy would consult his real estate broker only. To-day he goes to several brokers, with all of whom he is more or less well acquainted. He leaves a statement of his needs either for buying

or selling, and finally carries out the business transaction with the broker who first finds what he desires. This is introducing keen competition. It becomes a matter of wits. The man who puts in the most energy, who is able most quickly to meet all requirements, finally makes the sale and earns the commission. As a result, a broker may no longer advertise the property which he has in charge and remain in his office to answer people who come to him, but he must solicit business. He must keep constantly in touch with men and women who have money to invest and may possibly be interested in some new proposition. He must not only supply their wants, but he must anticipate them. He must keep constantly on guard lest some slip in his arrangements hinder the final trade, or some broker step in ahead of him and secure the commission.

No very definite idea of the income from the business can be gained, as so much depends upon the individual, but the 10 who discussed the question thought that in Boston some dozen firms which did most of the business had a yearly income of over \$10,000, ranging possibly to \$50,000, and about 50 firms an income of from \$5,000 to \$10,000, while the rest of the men in the business were making a living or little more. The nearest approach to a definite statement given in regard to income was that a man of good ability in handling real estate should, after the first year or two, make from \$3,000 to \$5,000 a year, with possibilities beyond this according to his abilities.

In the suburbs about Boston, which are rapidly becoming manufacturing centres and where population is increasing more rapidly than in the city itself, the outlook is more encouraging. Even there, however, the cost of building materials is so high that there is little inducement for men to invest money in buildings. Probably also the high taxes and the possibility that capital invested in stocks and bonds may escape taxation have kept Boston capital from seeking real estate as an investment. In New York, where population is growing so rapidly that the problem of housing the people is a serious one and where land is just now being opened up in suburban localities, the real estate business is much more alive than here.

EXPERIENCE OF MEN IN REAL ESTATE BUSINESS.

So far we have considered the general characteristics of the real estate business in Boston, noting those special features which might be of interest to a man or a woman about to enter this profession. It remains now to study somewhat more in detail the character and qualifications which are considered essential by men who have succeeded in the business. It is also of value in our study to learn from men of recognized ability and standing what, in their opinion, is the opportunity for women and particularly the reasons for their approval or disapproval of a woman as a real estate broker.

Only 3 dealers considered it essential that the man who becomes a real estate broker possess capital, yet all felt that it was desirable to have or be able soon to acquire a large circle of friends or acquaintances who had capital to invest. The man who would win for himself success as a broker should be keen, alert, persuasive in argument and able to inspire confidence, of good judgment, honesty, and tact. He must also be a man of much patience and persistence, never dismayed at rebuffs nor discouraged at long delays in sales. He should have not only a thorough knowledge of property in the immediate section in which he has property to handle, but information regarding social, political, and moral conditions in all similar localities. He must also possess information regarding the history of sales, taxes, and building, especially of all houses similar to those which he has in charge. Some knowledge of real estate law is essential, but may be acquired fairly easily while learning the business. Add to all these qualifications, in the words of several brokers, the trade instinct, a good appearance, a pleasant manner of approach, and a good voice, and one is well equipped for the demands of an ordinary real estate broker. But, if one be ambitious to control a large extensive office, he must be a man with unusual executive and organizing ability in order to set in operation and guide the machinery of a modern real estate office.

When a boy or a man, no matter what his education, enters the real estate business with a view to making it his life-work, he begins practically as errand boy. He goes out to tack up

signs, he hears the talk of the office. As soon as possible he is promoted to the position of clerk or runner, where he attends to calls that come in to the main office. He answers questions and explains about property advertised for sale or to rent. He is sent out to solicit business. For instance, when a large office is given charge of a big commercial building in which are vacant offices, he with 6 or 8 other men interview perhaps a 100 men a day, to interest them to move into the new building. When a man proves he has ability, he is allowed occasionally to show property, and, if he have a real estate instinct and initiative which keeps him alert to possibilities on these trips, he is advanced to the position of assistant to some man in charge of a special suburb. Here he learns the entire routine of work, studies the general situation, and learns how it affects real estate in that locality. From this position he may be promoted to full charge of some suburb, where he may work out his theories and prove his ability to interest, persuade, and deal with people.

The pertinent question arises, To what extent can women meet these qualifications and secure this experience? As a rule, the men who were interviewed seemed somewhat dubious as to the field for women. To most of them the proposition came as a new idea, and this may account for the number of decided negatives. Of the 52 answers received, only 3 admitted that they saw no reason why a woman who had the necessary qualifications, ability, and training should not make as much of a success as a man. She has already succeeded, they said, in law and medicine, professions supposed to belong entirely to men. Eleven considered it a possibility, but of these 6 felt that they would not advise the attempt. They suggested that some lines of the business might be carried on by women, as renting or leasing apartment houses, but they seemed very positive that a woman could not handle down-town property, such as large office buildings or stores. Some were quite sure a woman could not put through a sale, while others felt that at best she could only do it occasionally, perhaps in a strictly suburban business where she was well known. A few thought she might be able to handle the mortgage end of the business, for there very little would be

left to her judgment, and people who had capital to invest could verify her statements.

Thirty-eight men, however, were strongly of the opinion that not only was there no opportunity for women in real estate business, but that it was not an occupation which would attract women. The reasons given for this feeling are valuable, even though not conclusive, as presenting the difficulties which a woman who goes into this line of work must face. Twelve men thought that the very conditions of the business made it essentially a man's work and not a woman's. Nine spoke particularly of the fact that it is necessary to solicit business on the streets, in offices of all sorts, and to deal almost entirely with men. One of the most serious difficulties was presented by 7 brokers who deprecated the necessity of showing vacant houses at any time convenient to the customer and to any class of people. After a business was once established, a woman could doubtless control more or less the character of the people with whom she would do business, but at first she must show property to whomsoever came. Other serious drawbacks were given. The woman must go into saloons possibly to collect rents. She must look after theatre property. She must collect rents from unruly tenants by force, if need be, or at times eject the tenants, removing windows on cold December days, turning off gas or water, sometimes even setting furniture into the street. In looking after repairs on the property under her care, she must go up to the roof to look after leaks or supervise work done by plumbers or painters or carpenters. At times she must use ladders to fasten a "To Let" sign in windows or on buildings. One of the most serious difficulties was that stated by 2 men who thought women temperamentally unable to endure the hard nervous strain and discouragement of the business, for example, the loss almost at the last moment of a sale over which she had worked for several months. Seven men thought the real trouble for women would be to gain the opportunity to learn the business, for most of the better class of real estate offices were opposed to admitting women on the same footing with men.

The fact of significance in these criticisms is that so few brokers interviewed were aware that there are at present in Boston at

least 22 women who have been actively engaged in real estate business for periods of time varying from 5 to 25 years. Seven men had heard more or less definitely that there were some women who had attempted to carry on real estate business, but believed they had not succeeded, as they had heard no more from them. However, 1 or 2 women were referred to by at least 2 brokers as doing a small, reliable business and making a good living or perhaps more. This would seem to indicate that, while Boston is conservative and while general competition is keen, there is a field for women where they may take up a line of work and have a clientèle quite distinct from that of men, and so be apart from the competition of the regular business. It would seem also to indicate that up to the present time women have not been able to gain an important position in the real estate world. At present they are at the same stage of education and opportunity in the business that men were when the movement toward a higher standard in real estate professional requirements began 40 or 50 years ago.

EXPERIENCE OF WOMEN IN REAL ESTATE BUSINESS.

Up to this point we have considered only the attitude of men who are engaged in the real estate business. There are, however, a number of women in Boston in this occupation. It is difficult to state the exact number, as many are registered by initials, which makes a special visit to each office necessary. Of the 75 real estate brokers interviewed, 22 were women. Nearly all types of women are represented except the college woman. Very few had had training for the business. One had studied law, another had worked for some years in the office of the registry of deeds, 4 had worked for some time as clerks in real estate offices, and 6 had had charge of their fathers' estates or property for a short time, while 10 had had no experience in real estate. Twelve spoke of the length of time in which they had been engaged in real estate business. Of these, 5 had had less than 5 years' experience, 3 from 10 to 20 years', and 4 from 20 to 26 years' experience.

Among the women interviewed, the proportion of those who

considered real estate business to be good in Boston was considerably larger than that among men; 14 of the 21 women who replied to the question considered it good as compared to only 6 of the 40 men answering the question. The explanation is simple. Men measure the returns of the less successful with those of men who are doing the largest business. Women measure their returns in real estate with those which they would receive as stenographers, clerks, or in similar occupations, and thus find the results large and consider the outlook promising.

In reply to the question as to what income one might expect in this business, the women interviewed, just as the men, found it difficult to make any exact statement, saying that the income varied, depending upon the individual and upon conditions. Several stated that at first the income had been very uncertain, but that, after they were once really started in business, the income had been good. Seven women gave as estimates of a possible income under favorable conditions sums ranging from \$800 to \$1,200, if a woman began entirely without capital. If, however, she had capital, and used this to good advantage in buying property at a low figure and selling later at an increase, she might make from \$2,000 to \$5,000 a year. One woman, who had no capital to start with, but who worked with borrowed money entirely, developing land and putting up buildings, said that from the first her income had been from \$5,000 to \$10,000 a year, and often more. Another woman, who had a good deal of capital when she began, and who devoted her entire energy to mortgages and loans, said she considered \$5,000 a year very small, and that her income ranged from that sum to \$20,000 a year. The majority of these women, however, were much more moderate in their expectations. It is important to notice that, while most of the women now in the business have a lower standard for income than most of the men interviewed, yet a few are able to see for women possibilities of income comparable to that which the best type of men expect, suggesting that the opportunity is waiting for women of larger ability and training and initiative.

Only one woman considered the difficulties referred to by men grave enough to deter them from the business. Sixteen ap-

proved strongly the work for the mature, self-possessed woman, while 5 were doubtful, not that success in this field was possible to women, but as to the wisdom of trying to cope with existing difficulties.

In addition to the financial advantage of the real estate business, women approve of it for women because so many details touch immediately home life. They understand better than men the importance of details, not only of arrangement of the house itself, but as to its location, its access to trains and electric cars, and the importance of neighborhood conditions. Particularly in renting and leasing houses the business has to be done with women, who usually look over the ground, leaving the final business arrangements to be done at the main office by their husbands. For these women it would be much easier to deal with a woman agent. In fact, this is one line of real estate work which several men referred to as being the most promising for women. As one man said, "Most men hate the renting end of the business, and would be glad to turn it over to a competent woman."

As has been already suggested, some lines of real estate business seem much more desirable for women to undertake than others. Women seem intuitively to have recognized this, and so far to have avoided the undesirable lines. For instance, no woman seems to have attempted to deal at all in selling farms or in handling down-town property, which includes the control of office buildings, stores, theatre buildings, and manufacturing plants. In fact, only 7 of the women interviewed do a general real estate business in the city, and of these 2 said they did comparatively little with renting or caring for property, as it demanded too much time. Three confine their work almost entirely to placing loans and mortgages,—another line which several men suggested might be possible for women. One of these women, however, specializes also somewhat in selling land. One woman deals in seashore property, buys land, and with borrowed capital builds upon it,—a line of work which men questioned as possible for women. Two women specialize in selling lodging-houses, one at the South End and the other in the Back Bay district. This work calls for an unusual amount of tact, and, as the business is confined almost entirely to women, seems

to be properly the work of the woman broker. Four women give their entire time to renting houses and caring for property, doing occasionally a little buying and selling for their customers. Six women have specialized in one particular suburb, and are doing there a general real estate business in all its branches.

Women have been able to avoid some of the other unpleasant features in actual practice. That this business necessitates being out in all kinds of weather, that it means hard work and often irregular hours and meals, women recognize, yet several found the life much less trying than that in the store or office. Most of these women have found that a certain quiet forcefulness was as effective in dealing with rough, ignorant men and with unruly tenants as the man's more violent actions and oaths. Regarding the dangers and unpleasantness of showing houses to all sorts of people and the difficulty of soliciting business, all of the women admitted that these conditions demanded maturity, wisdom, and much strength of character. But almost every woman in the business stated that she herself had never experienced anything disagreeable, and thought the entire question depended upon the woman herself.

CONCLUSION.

That women have already made a beginning in real estate business must be accepted. So far, apparently, the profession has not attracted women of the same degree of education and training as men who are now prominent in the business, but there are already in it women who are serious, earnest, and progressive enough to pave the way in a new profession. These women have already done something to overcome public prejudice and to establish confidence in woman's business judgment and ability. They have made it plain that women in certain lines of real estate work need not come into unpleasant competition with men; that women brokers will be appealed to by women wishing to buy or to rent houses or to invest capital in houses or mortgages; and that opportunities will undoubtedly develop more along every line. They have shown that there is an opportunity for the woman who wishes to speculate in selling or developing land.

But perhaps more than all else they have proved that it rests with the individual woman herself whether the competition with men and the intercourse with people in general, which must necessarily be a part of securing real estate business, shall be of an unpleasant and impossible nature or not. Some difficulties are yet to be overcome and some problems to be met, and it remains for the woman of larger training and business experience to grasp the situation and handle real estate in the more progressive style already adopted by men of the best type.

Undoubtedly, the most serious problem at present is the matter of securing the necessary training and experience to fit women to take up the problems of real estate. Both men and women recognize that for either a man or a woman the initial steps are difficult, and particularly so for a woman. Five men interviewed declared the best way to secure this opening would be to begin by getting a few houses to rent and working up from that. Fourteen said, "Start in at once, without training, use one's own initiative, and go ahead," 2 suggesting desk room in a real estate office where one would hear the subject talked constantly. Five advised an office in some suburb where one had many friends and acquaintances; 31 saw no way but to secure some position in a real estate office; 4 advised particularly a clerical position, if none other was possible, and considered this the only practical way of really learning the business. Of the women who gave suggestions on this subject, 16 thought by far the best way was to secure some position in a real estate office, as stenographer, if necessary, in order to learn the general details of the business; but, if this were not possible, 9 advised starting independently, 5 preferring a suburban business at first.

While both men and women recognize the advantage of practical experience, both admit the difficulties of securing it. Some women are willing to take women into their offices as assistants to learn the business, but none of the large best type of men's offices would consider the woman clerk, no matter how clever and business-like she might be. The reasons given were mainly those of chivalrous men. They felt that it would be impossible to send a girl out to do all sorts of things and to all sorts of places as they could a boy. It would be necessary to discriminate, and

this, as one man said, he was "too busy to do." In one office where the manager was asked if he would be willing to take a young woman as clerk, the reason for his refusal was that his customers would not like it.

After meeting these objections over and over again, one comes finally to the conclusion that, while it may be very desirable for a woman to get practical experience as clerk in a man's real estate office, while the field is new, women must get their training and experience in some other way. There are already some schools where courses in real estate are offered, but so far many of these are open only to men, as, for example, the courses offered at the Young Men's Christian Association. There are, however, numerous correspondence courses open to women which are more or less valuable, and which give the essentials in real estate, law, and business management. In the various business colleges, too, some training is given in commercial law, but this is hardly sufficient to meet the needs of a woman who desires to learn the business.

By far the best possibility for the woman is through the entering wedge of stenography. In her training for this position it should be possible for a woman to secure at some strictly vocational school—as, for example, Simmons College—not only a thorough course in stenography and typewriting, but also in the allied subjects. The course might be so expanded that a woman who desires to specialize in real estate might elect such subjects as the making of leases and mortgages, a study of land values, insurance, etc., where she could learn all details connected with real estate business. With this training she should be able to secure a good position as clerk in a real estate office and learn some of the practical details of the business. She would meet people who were interested in real estate problems, and would hear them discussed more or less fully. The woman with ability along this line would thus be able to get practical experience sufficient to start business for herself.

Doubtless, when women of the same education and business training as men enter this field, they will be able to win and hold the respect and confidence of men in the business, as well as that of the public, and place real estate on a higher professional

plane for women, just as men of splendid business ability and intellectual attainments have been able to give real estate business a different standing for men. Women have been pioneers in this line of work and have "blazed the trail" for other women who are to follow, and their experience is of utmost significance for purposes of this study.

INDEX

INDEX

ACCOUNTANCY, opportunity for women, 120-121.

AGRICULTURAL COLLEGES, influence on New England farming, 7, 8, 10; attitude of farmers towards, 11; influence on development of New England orchards, 25, 26.

AGRICULTURE, 1-69: training, 3; choice of location, 4; labor problem, 4, 11, 12; modern methods, 7-8; specialization, 8; intensive farming, 8; average size of farms, 9; seasonal conditions, 11; problem of markets, 12; outlook in Massachusetts, 67.

Opportunities for women, 1-69: limitations of field, 3-4; types of work adapted to women, 3; labor problem, 4; training and experience, 4, 68; capital required, 69.

APRIARIES, *see* BEE CULTURE.

APPOINTMENT BUREAU, WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION, aim, xv; publications, xvi; vocational information, xvii; records of secretarial workers, 115-116.

ARMENIANS, standards of living, 22.

ASSOCIATED CHARITIES, work, 89; district secretaries, 95; training, 95; salaries, 95; opportunity for advancement, 95; number of women employed, 103.

ASSOCIATION OF COLLEGIATE ALUMNAE, co-operation with the Women's Educational and Industrial Union, xvi, 79.

ATTENDANCE OFFICER, employment of woman as, 78; duties, 102; salary, 105.

BANKS, opportunity for women as secretaries, 119-120.

BEE CULTURE, 54-60: importance as industry, 54, 55; statistics regarding, 54-55; conditions of business, 55-58; profits, 56, 58-60; land required, 56; size of plant in cases studied, 56; training, 56; special lines, 56-57; raising queens, 57; labor problem, 57, 60; expenses involved, 57, 58, 59; capital required, 57-59; outlook in business, 58-60; investments, expenses, returns and profits in business, table showing, 59; requirements for success, 60; opportunity for women, 60.

BEES, when imported into Massachusetts, 54; use by market gardeners, 57; value on farm, 60.

BOSTON, extent of social work in, 83-84; number of women holding social service positions, 84.

BUSINESS FIRMS, secretarial positions in, 119-121; requirements, 120; salaries, 120, 121.

CAMBRIDGE, extent of social service in, 87; number of women engaged in social work, 87.

CHILD WELFARE, organizations working for, 89-90.

CHURCH WORKER, salary problem, 93.

CLUB LEADERS, in settlements, 99; salaries, 99.

COLLEGE EDUCATION, advantages of for secretaries in educational institutions, 124-125.

COLLEGE WOMEN, interest in secretarial work, xvi-xvii; salaries, 128-133, 135-141; college-trained secretaries, 134-141.

COURT REPORTERS, 123-124: number of women in Massachusetts, 123; salaries, 123; requirements, 123; examinations, 124; training, 124.

CURBSTONE BROKERS, work, 153.

DAIRY FARMING, 61-67: outlook in business, 4, 66; conditions in business, 61-66; training, 61; capital required, 61, 63-64; size of farms, 62; labor question, 62, 66; wage paid, 62; labor cost, 62-63; employment of Italian women, 62; expenses, 62-66; prices paid for milk, 63; investments, expenses, and profits in industry, table showing, 64-65; opportunity for women, 66-67.

DISTRICT NURSING, work, 89; number engaged in, 89; training required, 96; salaries, 96; field for, 96.

DISTRICT SECRETARIES OF ASSOCIATED CHARITIES, training courses for, 95; salaries, 95.

EXECUTIVE SECRETARIES, *see* SECRETARIAL WORK.

FALL RIVER, extent of social service in, 86.

FARMING, *see* AGRICULTURE.

FELLOWSHIPS, offered by the Women's Educational and Industrial Union, 94-95.

FLORICULTURE, 33-42: conditions in business, 33-38; similarity to nursery culture, 33; training and experience, 33-34; specialization, 34, 39; size of plant, 34; labor prob- lem, 35; nationalities employed, 35; average wage, 35; expenses in greenhouses, 35-37; labor cost per greenhouse, 35; investments, expenses and profits in business, table showing, 36-37; capital invested, 38; profits, 38; outlook in business, 38-40; conditions affecting, 39; competition, 39; conditions favorable to small grower, 39; opportunity for women, 40-42.

FOREIGN COMPETITION, in market gardening, 21-22.

FOREIGN LABOR, employment on farms, 11-12; in market gardens, 18; in nursery culture, 43.

FROST, effect on market gardens, 21.

FRUIT GROWING, 25-33: as a commercial enterprise, 25-26; ways of developing, 26; modern methods, 26; training demanded, 26; general conditions of business, 26-30; land required, 26-27; labor problem, 27; picking season, 27; wages paid, 27; summer laborers, 28; expense in conducting fruit farm, 28, 29; expense per tree, 28, 33; returns per tree, 30; capital necessary, 28-30; investments, expenses and profits in business, table showing, 29; outlook in business, 30-31; relation to market gardening, 30; relation to dairy farming, 30; essentials for success, 31; opportunity for women, 31-33.

GARDENING, *see* FLORICULTURE, also MARKET GARDENING.

GREENHOUSES, helpers required for, 15, 18; labor cost, 19; expenses for in floriculture, 35-37; taxes, 35; estimate of first cost, 36-37; use in nursery plants, 42; use of bees in, 57. *See also* FLORICULTURE.

HORTICULTURE, *see* FLORICULTURE.

HOSPITAL SOCIAL SERVICE, organizations conducting, 92.

HOSPITAL SOCIAL WORKERS, duties, 97; preparation, 97; course for, 97; salaries, 98; opportunity for advancement, 98.

HOTBEDS, size used by market gardeners, 15.

INTENSIVE FARMING, influence of agricultural colleges on, 8.

INVESTIGATORS, work, 94; training, 94-95; salaries, 94, 95; course offered by Women's Educational and Industrial Union, 94-95.

ITALIAN LABORERS, employment in market gardens, 18.

ITALIAN WOMEN, employment on dairy farms, 62.

ITALIANS, standards of living, 22.

LANDSCAPE GARDENING, relation to nursery culture, 46.

LANGUAGES, call for in secretarial work, 135.

LAW FIRMS, secretarial work in, 122-123: duties, 122; requirements, 122; salaries, 122-123; advantages, 123.

LAWRENCE, extent of social service work in, 88.

LODGING HOUSES, sale of by women brokers, 161-162.

LOWELL, social service situation in, 86-87.

MARKET GARDENING, 12-24: decline in, 18; reasons for, 21-23; relation to fruit culture, 12-13; development, 13; returns from, 13; training for, 14; conditions of business, 14-20; kinds of work, 14; combined with other industries, 14; seasonal aspect, 15, 22; acreage necessary, 15; investments, expenses, returns and profits, table showing, 16-17; labor problem, 15, 18-20; nationalities preferred, 18; employment of women, 18, 23; wage paid male and female laborers, 18; labor cost per acre, 19; per greenhouse, 19; per cent. of total expenses represented by, 19-20; capital necessary, 20, 22-23; profits from, 20; competition with Italians and Armenians, 21-22; outlook in business, 21-23; competition with South, 21; effect of southern frost, 21; opportunity for women, 23-24.

MASSACHUSETTS, outlook for agriculture in, 67.

MATRONS, training, 101; salaries, 101-102.

MEDICAL SOCIAL SERVICE, 95-98: types of workers, 95-96; training, 96, 98; salaries, 96, 97, 98; opportunity, 98; number of women employed, 102-103.

MILK, prices paid producers, 63; opportunity for women to help in solving problem, 66. *See also DAIRY FARMING.*

NEW BEDFORD, extent of social work in, 87-88.

NURSERY CULTURE, 42-47: conditions in business, 42-44; relation to flower growing, 42; training and experience, 42, 45; stock grown, 42; size of plant, 42-43; character of work, 43; labor question, 43; wage per day, 43; labor cost per acre, 43; capital required, 43; investments, expenses and profits, table showing, 44-45; outlook in business, 44-46; competition, 45; advantages as business enterprise, 46; opportunity for women, 46-47.

NURSES, employed by agencies for the betterment of health, 98; work, 98; salaries, 98. *See also DISTRICT NURSING and SCHOOL NURSES.*

ORCHARDS, *see FRUIT GROWING.*

PHYSICIANS, secretarial work for, 121-122; requirements, 121; salaries, 121, 122.

PLAYGROUND WORK, relation to settlement work, 100; seasonal character, 100; training for, 100; salaries, 100; opportunity in, 100; number of women employed, 102.

PLAYGROUNDS, cities conducting, 90.

POULTRY RAISING, 47-54: advantages for women, 47; capital required, 47, 50, 52; qualifications necessary, 47, 52; conditions in business, 47-52; size of plant in farms studied, 48; special lines, 48-49; fancy stock, 49; labor problem, 49; expenses, 49, 52; investments, expenses and profits in business, table showing, 50-51; returns and profits per hen, 52; outlook in business, 52-53; causes for failure, 52-53; opportunity for women, 53-54.

PRIVATE SECRETARIES, *see SECRETARIAL WORK.*

PROBATION OFFICERS, women employed as, 102; training, 102; salaries, 102.

PROVIDENCE, social service activities in, 84-85; women holding positions, 85.

PUBLISHING HOUSES, opportunity for women, 120.

REAL ESTATE BROKERS, license fee for, 149; schedule of commissions, 150-151.

REAL ESTATE BUSINESS, 145-165: purpose and scope of present study, 147-149; situation in Boston, 147-149; type of men engaged in, 147-148; competition, 149; capital required, 149; number of persons in Boston engaged in, 149; brokers' commissions, 149; special features of in Boston, 149-155; types of business, 149, 152, 153; outlook in Boston, 153-154; in suburbs, 155; opinion of men and women brokers regarding, 154, 160; income, 155, 160; experience of men, 156-159; qualifications for, 156; working up in business, 156-157.

Opportunity for women, 157-165: limitation of field for women 157-158; lines of work for women, 157, 159, 161-162; number of women in Boston engaged in, 159; experience of women in, 159-162; types of women represented, 159; income, 160; type of woman required, 161; advantages of business, 161; means of securing training and experience, 163-164.

REAL ESTATE EXCHANGE, schedule of brokers' commissions, 150-151.

RURAL HOME MAKING, problem in New England, 5.

SCHOOL FOR SOCIAL WORKERS, course in hospital social service, 97.

SCHOOL NURSES, duties, 96; training, 97; salaries, 97.

SCHOOL VISITORS, work supported by private philanthropy, 93-94.

SECRETARIAL WORK, 109-143: demand for secretaries, 111; importance of occupation, 112; purpose and scope of present study, 113-115; sources, 115-117; statistics regarding, 114; age group, 114-115; wage scale, 115; records of secre-

tarial students, 115-116; colleges represented, 116; definition of term secretary, 117; relation of stenographer to secretary, 117, 118, 119, 141; training, 117-119.

Types of positions, salaries and requirements, 119-127: secretary in business firms, stores and commercial offices, 119-121; in banks, 120; in publishing houses, 120; as physician's secretary, 121-122; in law firms, 122-123; as official court reporter, 123-124; in educational institutions, 124-126; in social organizations, 126; as private secretary, 126-127; as executive secretary, 127.

Salaries, 128-133, 135-141: of college-trained women, 128-133, 135-141; of women with college training and without, table showing, 129; wage of stenographers and secretaries after 1 to 10 years' experience, chart showing, 130; of women without college training, table showing, 131; of women with and without college training by quarters, table showing, 132; after 3 and 5 years' experience, chart showing, 133.

College-trained secretaries, 134-141: preparation, 134-135; studies most valuable for, 134-135; salaries of secretaries trained in Simmons College, 135-141; initial salaries, chart showing, 139; salaries by years of experience and length of course, table showing, 140.

Personal qualifications, 141-142; character of work, 142; as a vocation, 142; limitations, 142; specialization in, 142.

SETTLEMENTS, character of work, 98; cities conducting, 91, 92.

SETTLEMENT WORK, number of women

employed in, 91, 102; preparation for, 98; types of workers, 99; salaries, 99.

SIMMONS COLLEGE, salaries of secretaries trained in, 135-141; types of secretarial positions held by graduates, 136-141; results from 1-year and 4-year courses, 141; course in real estate suggested for, 164.

SOCIAL SERVICE, 71-108: nature of, 73; right attitude of workers toward, 73-76; danger of commercializing, 73, 75; opportunity for volunteers, 75; development of field, 77; interest to women, 77; purpose of present study, 78; scope, 79; questionnaire used, 79-80; geographical extent, 80-81; cities and towns visited, table showing, 81; extent of social service in cities and towns visited, 82-88; organizations and institutions conducting, 88-92.

Types of positions, salaries and requirements, 92-102: visitors, 92-94; investigators, 94-95; Associated Charities workers, 95; medical social service workers, 95-98; district nurses, 96; school nurses, 96-97; hospital social workers, 97-98; settlement workers, 98-100; playground workers, 100; Young Women's Christian Association workers, 100-101; matrons, 101-102; social workers in state institutions, 102.

Training, 103; age and religious qualifications, 104; salaries of workers, 104-108; salaries of women registering with the Appointment Bureau, table showing, 106; salaries offered by employers applying to Appointment Bureau, table showing, 107; salaries com-

pared with those of teachers, 108; opportunity for volunteers, 108.

SOUTH, competition with market gardens in North, 21.

STENOGRAPHY, relation to secretarial work, 117, 118; cost of preparation, 118; time required, 118; subdivision in, 119; wage of stenographers after 1 to 10 years' experience, chart showing, 130; as an entering wedge to real estate business, 164. *See also SECRETARIAL WORK.*

TEACHERS, in settlements, 99-100; of commercial subjects, 137.

TRUANT OFFICERS, *see ATTENDANCE OFFICERS.*

VISITING HOUSEKEEPER, employed by Associated Charities, 95; salaries, 95.

VISITING NURSES, *see DISTRICT NURSING.*

VISITORS, character of work, 93; training, 93; religious qualifications, 93; salaries, 93. *See also DISTRICT NURSING and SCHOOL VISITORS.*

VISITORS TO GIRLS ON PAROLE, salaries, 102.

WOMEN: as attendance officers, 78; as accountants, 120-121; as clerks in real estate offices, 163-164. Employment of in market gardens, 18; in flower picking, 35. Opportunity in agriculture, 1-69: limitations of field, 3-4; types of work adapted to, 3; labor problem, 4; training and experience, 4, 68; qualifications, 68; capital required, 69. Opportunity in bee culture, 60; combining with other industries, 60; qualities making for success, 60. Opportunity in dairy farming, 66-67: aid in solving milk problem, 66; how some women have succeeded, 67. Opportunity in nursery culture, 46-47: difficulties, 46; special lines, 46-47. Opportunity in poultry raising, 53-54: advantages, 47; size of plant advisable, 53; training and experience, 53; success in work, 53; as an avocation, 54. Opportunity in floriculture, 40-42; training and experience, how secured, 40, 41; developing business, 40-41; specialization, 41; combining with other forms of agriculture, 41. Opportunity in fruit growing, 31-33: why desirable for women, 27; objections, 31; ways of approach to industry, 32. Opportunity in market gardening, 23-24: difficulties confronting, 23; alternatives open to, 24; combining different lines of agriculture, 24. Opportunity in real estate, 145-165: essential qualifications, 156; opinion of men as to field for women, 157-158; type of work for women, 157, 160-162; difficulties confronting women, 158; experience of women in business, 159-162; number engaged in, 159; types represented, 159; training and experience, 159; means of securing, 163-164; income, 160; type of woman required, 161; advantages of business, 161; controlling unpleasant features, 162. Opportunity in secretarial work, 109-143: statistics regarding, 114; training, 118-119; types of posi-

tions with salaries and requirements, 119-127; women as secretaries in business firms, 119-121; in banks, 120; in publishing houses, 120; as accountant's assistant, 120-121; as physician's secretary, 121-122; in law firms, 122-123; as official court reporters, 123-124; in educational institutions, 124-126; in social organizations, 126; as private secretaries, 126-127; as executive secretaries, 127; salaries, 128-133, 135-141; qualifications, 141-142; development of field, 142.

Opportunities in social service, 71-108: interest of occupation to women, 77; cities in which women are engaged as social workers, 82-88; types of work in various organizations, 88-92; opportunity in different lines of work, training required, salaries, chance for advancement, 92-102; women as visitors, 92-94; as investigators, 94-95; as Associated Charities workers, 95; as medical social service workers, 95-98; as district

nurses, 96; as school nurses, 96-97; as hospital social workers, 97-98; as settlement workers, 98-99; as playground workers, 100; as Young Women's Christian Association workers, 100-101; as matrons, 101-102; as social workers in state institutions, 102; number of women employed as social workers, 102-103; training required, 103; qualifications, 104; salaries and opportunity for advancement, 104-108; chance for part time and volunteer work, 108.

Vocation of rural home making, 5.
WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION, training course for investigators, 94-95.

WORCESTER, field of social service in, 85; number of women employed in social service, 85.

YOUNG WOMEN'S CHRISTIAN ASSOCIATION, workers employed, 100; training, 100-101; salaries, 101.

YOUNG MEN'S CHRISTIAN ASSOCIATION, course in real estate, 164.



020440100

CONSERVED
1104R KG
HARVARD COLLEGE

